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BASE VOLUME 3 APPEND.. (U) SCIENCE APPLICATIONS
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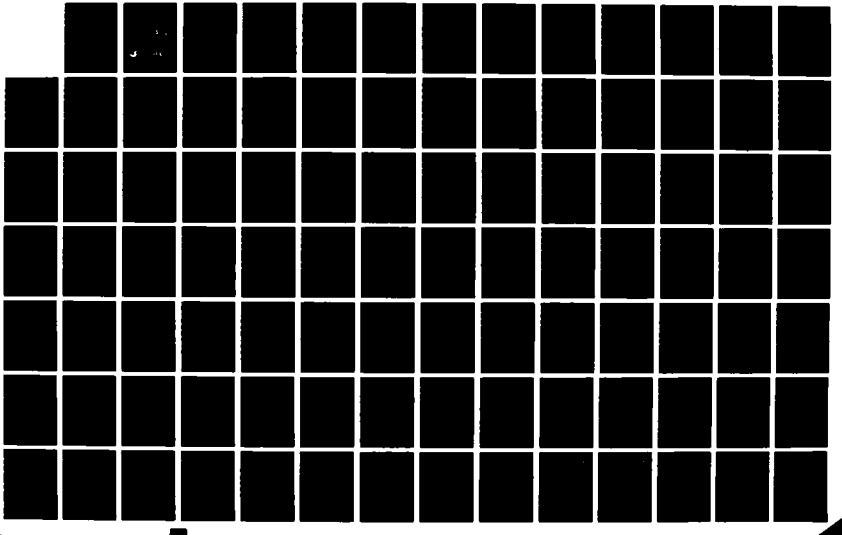
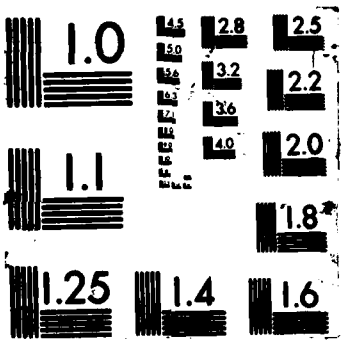
UNCLASSIFIED ESL-TR-85-52-VOL-3 MIPR-FY8952-18023 F/G 24/3 NL

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ESL-TR-85-52
VOLUME III

(1)

IN SITU BIOLOGICAL TREATMENT TEST AT KELLY AIR FORCE BASE, VOLUME III: APPENDICES

R.S. WETZEL, C.M. DURST, D.H. DAVIDSON, D.J. SARNO

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
8400 WEST PARK DRIVE
MCLEAN VA 22101

JULY 1987

FINAL REPORT

JUNE 1985 - MAY 1987

AFESC

ENGINEERING & SERVICES LABORATORY
AIR FORCE ENGINEERING & SERVICES CENTER
TYNDALL AIR FORCE BASE, FLORIDA 32403

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REPORT DOCUMENTATION PAGE

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FIELD	GROUP	SUB-GROUP	Environmental Engineering (continued on reverse)
13	02		Ground Water
06	13		Water Treatment

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

The objective of this effort was to field test in situ biodegradation to treat aquifer contaminants. In situ biodegradation is enhanced by stimulating the indigenous subsurface microbial population by the addition of nutrients and an oxygen source to promote degradation of organic contaminants. In situ treatment affects contaminants sorbed to soil as well as dissolved in groundwater. It is potentially faster, and therefore cheaper, than conventional pump-and-treat technologies.

The test site, located at Kelly AFB, Texas, was contaminated with a mixture of organic and inorganic chemicals. The treatment system consisted of an array of nine pumping wells and four infiltration wells. These wells circulated groundwater and transported the treatment chemicals throughout the 1800 square feet treatment area. Oxygen was supplied by means of a hydrogen peroxide solution. Nutrients were principally ammonium and phosphate salts. The system was operated for 9 months.

Data showed evidence of both aerobic and anaerobic biodegradation. Decreases in tetrachloroethylene and trichloroethylene concentrations in groundwater correlate with anaerobic

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HWERL
26 West St Clair
Cincinnati, Ohio 45268

18. DESCRIPTORS:

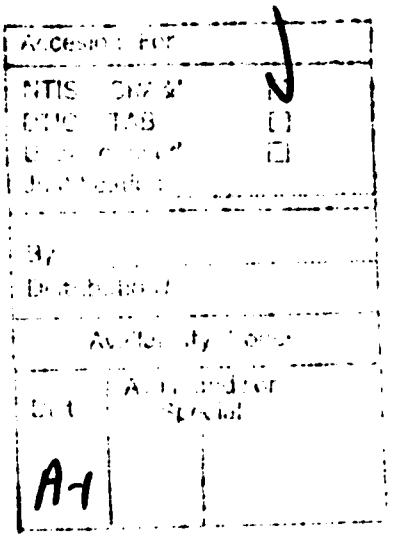
Microbiology	Microbiological Testing	Aquifers
Waste Treatment	Hydrogen Peroxide	Hydrology
Pollutants	Chlorinated Hydrocarbons	Hydrocarbons
Water Wells	Aromatic Hydrocarbons	Chemistry
Biology	Calcium Phosphates	Degradation
Costs	Cost Models	Antimony
Heavy Metals	Chemical Precipitation	Plugging
Iron Compounds		

IDENTIFIERS:

Biological Degradation	Bioreclamation
Groundwater Treatment	Biodegradation
Underground Pollutants	In Situ

19. microcosm tests. Aerobic biodegradation was indicated by acid and carbon dioxide production, and increases in petroleum hydrocarbon concentrations in groundwater. However, any biodegradation of these hydrocarbons was too small to be quantified The main problems experienced during testing were caused by reactions between injected chemicals and subsurface minerals. Calcium phosphate precipitation clogged infiltration wells and reduced the infiltration capacity of the test area by 90 percent. Metal sediments, primarily iron compounds, were found in the treatment system plumibng. These metals were probably mobilized by chemical reactions resulting from injecting high concentrations of hydrogen peroxide and nutrients, and may have been transported as small particles. The costs of the in situ treatment test were closely monitored. The technology was found to be no more expensive than conventional technologies.

The study confirms that indigenous bacteria can be enhanced to degrade organic contaminants. The problems with in situ treatment are primarily those of delivery of chemicals and minimizing adverse reactions between injection chemicals and subsurface minerals.



EXECUTIVE SUMMARY

The objective of this project was to field-test *in situ* biological degradation for removal of organic contaminants from soils and groundwater. *In situ* biological degradation involves stimulation of the indigenous subsurface microbial population by the addition of nutrients and an oxygen source (hydrogen peroxide) to promote degradation of organic contaminants present in soils and groundwater.

A site was selected for the test at Kelly AFB, Texas. This site, designated E-1 in the Phase I Installation Restoration Program (IRP) Report, was contaminated with a mixture of organic and inorganic compounds. A groundwater circulation system was installed within a 60-foot diameter portion of the site. This system consisted of nine pumping wells and four injection wells; groundwater was pumped to a central tank; nutrients and hydrogen peroxide were then added to the flow before reintroduction to the subsurface.

Literature review, site characterization, treatability studies, design, installation, startup, and approximately 3 months of operation were conducted as an initial phase and are reported in Volume I. Operation of the system was continued for an additional 5 months. Volume II documents the data collected during the full field operations period, analysis of system performance, and general considerations and cost analysis for applications to future sites. This Volume III report includes, in Appendix form, the analytical data collected during the demonstration project and analytical methods used.

The results of the test at Kelly AFB allowed for a number of conclusions regarding *in situ* treatment. The low and variable permeabilities at the test site resulted in a slower delivery of nutrients and oxygen source than anticipated, as well as difficult operating conditions, but did not prevent degradation from occurring.

Data collected during the test show evidence of degradation of contaminants by both aerobic and anaerobic means. Decreases in concentrations of PCE, TCE, and hydrocarbons in the groundwater were observed. A number of other effects of in situ treatment were also observed as a result of this test. The precipitation of calcium phosphate began almost immediately upon the introduction of nutrients and hydrogen peroxide. This precipitation had a negative impact on the project by reducing the permeabilities of the soil surrounding the injection wells. A migration of some metal compounds (particularly iron) from soil was also observed and may have been caused by movement of fine-grained particles in the subsurface. Work performed on estimating the cost of in situ treatment showed that full-scale implementation would be no more expensive than conventional techniques. The cost of performing in situ treatment for the entire site at Kelly AFB where the test was performed was estimated to be approximately $100 per ton of soil in the saturated zone. The cost of removal and redisposal was estimated to be $121 per ton.

A number of recommendations were presented regarding the future of in situ treatment. Recommendations include suggestions for future testing to determine the cause of calcium phosphate precipitation, study aerobic vs. anaerobic treatment, develop optimum treatment systems and monitoring programs, determine the cause of metals mobilization, and develop optimal nutrient compositions and sources of oxygen. Specific attention was paid to the requirements that will be posed by applying in situ treatment at a full-scale installation.

PREFACE

This report was prepared by Science Applications International Corporation (SAIC), 8400 Westpark Drive, McLean, Virginia 22102, under EG & G Idaho, Inc. Subcontract C84-130562 for the Air Force Engineering and Services Center, Engineering and Services Laboratory, Tyndall Air Force Base, Florida, and the EPA Office of Research and Development, Hazardous Waste Engineering Research Laboratory, Cincinnati, Ohio.

A number of subcontractors and consultants were used to provide specialized expertise for in situ biological degradation. These subcontractors include: FMC Corporation Aquifer Remediation Systems; Biosystems, Inc.; Dr. C. H. Ward, Rice University; Memphis State University; Environmental Research Group, Inc.; Hamilton Drilling and Engineering Testing, Inc.; K. W. Brown and Associates; Mr. Paul Rogoshewski; Shilstone Engineering Testing Laboratories; and Aqualab, Inc.

This technical report is divided into three volumes. Volume I presents work done between May 1984 and September 1985 and discusses in detail the site characterization, laboratory studies, and treatment system design and installation. Volumes II and III summarize the work performed between October 1985 and February 1987. Volume II discusses the system operation and performance, results of the field demonstration project, and the cost of in situ biological treatment. Analytical data and methodologies are presented in Appendix form in Volume III. Ms. Barbara Broomfield was the EG & G Idaho, Inc. Project Officer. Captain Edward Heyse was the AFESC Project Officer, and Mr. Stephen James was the EPA Office of Research and Development Project Officer.

This report discusses field demonstration using proprietary formulations of nutrients and hydrogen peroxide. It does not constitute an endorsement of these products by EG & G Idaho, Inc., the Air Force or EPA, nor can it be used for advertising the product.

This report has been reviewed by the Public Affairs Office (PA) and is releasable to NTIS. At NTIS, it will be available to the general public including foreign nationals.

This technical report has been reviewed and is approved for publication.

Edward Heyse

EDWARD HEYSE, Capt., USAF, BSC
Project Officer

LAWRENCE D. HOKANSON, Col, USAF
Director, Engineering and
Services Laboratory

Thomas Jakelhe

THOMAS J. WALKER, Lt Col,
USAF, BSC
Chief, Environics Division

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APPENDIX A

RESULTS OF LABORATORY ANALYSES

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

JRB ASSOCIATES
8400 Westpark Drive
McLean VA 22102

30 June 1985
Sample Nos.: 18094-108

Date Taken: 5/23/85

Date Received: 5/24/85

Description	Hydrocarbons mg/L
Well I-1	<1.
Well I-2	<1.
Well I-3	1.
Well I-4	3.
Well M-1	<1.
Well M-2	3.
Well P-1	1.
Well P-2	2.
Well P-3	<1.
Well P-4	2.
Well P-5	<1.
Well P-6	2.
Well P-7	<1.
Well P-8	1.
Well P-9	1.

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18100

JRB ASSOCIATES
8400 WESTPARK DRIVE
McLean VA 22102

SAMPLE DESCRIPTION: Well P-1

Date Taken: 5/23/85 1305 Date Received: 5/24/85 1700

METHOD 625
ACID EXTRACTABLES

ug/L	Compound	ug/L	Compound
<10	2,4,6-Trichlorophenol	<10	4-Nitrophenol
<10	4-Chloro-3-Methylphenol	<25	2,4-Dinitrophenol
<10	2-Chlorophenol	<25	2-Methyl-4,6-dinitrophenol
<10	2,4-Dichlorophenol	<10	Pentachlorophenol
<10	2,4-Dimethylphenol	<10	Phenol
<10	2-Nitrophenol		

PESTICIDES

ug/L	Compound	ug/L	Compound
<0.04	Aldrin	<0.03	alpha-BHC
<0.03	Dieldrin	<0.06	beta-BHC
<0.10	Chlordane	<0.06	gamma-BHC
<0.05	4,4'-DDT	<0.03	delta-BHC
<0.03	4,4'-DDE	<1.0	PCB-1242
<0.04	4,4'-DDD	<1.0	PCB-1254
<0.03	alpha-Endosulfan	<3.U	PCB-1221
<0.04	beta-Endosulfan	<3.0	PCB-1232
<0.04	Endosulfan Sulfate	<1.0	PCB-1248
<0.04	Endrin	<0.3	PCB-1260
<0.08	Endrin Aldehyde	<1.0	PCB-1016
<0.04	Heptachlor	<2.0	Toxaphene
<0.03	Heptachlor Epoxide		

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18100

JRB ASSOCIATES
8400 Westpark Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-1

Date Taken: 5/23/85 1305

Date Received: 5/24/85 1750

BASE/NEUTRAL COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acenaphthene	<25	3,3'-Dichlorobenzidine
<10	Acenaphthylene	<10	Diethyl phthalate
<10	Anthracene	<10	Dimethyl phthalate
<50	Benzidine	<10	2,4-Dinitrotoluene
<10	Benzo(a)anthracene	<10	2,6-Dinitrotoluene
<10	Benzo(b)fluoranthene	<10	Di-n-octylphthalate
<10	Benzo(k)fluoranthene	<10	Fluoranthene
<10	Benzo(a)pyrene	<10	Fluorene
<10	Benzo(ghi)perylene	<10	Hexachlorobenzene
<10	Benzyl butyl phthalate	<10	Hexachlorobutadiene
<10	Bis(2-chloroethyl)ether	<25	Hexachlorocyclopentadiene
<10	Bis(2-chloroethoxy)methane	<10	Hexachloroethane
<10	Bis(2-ethylhexyl)phthalate	<10	Indeno(1,2,3-cd)pyrene
<10	Bis(2-chloroisopropyl)ether	<10	Isophorone
<10	4-Bromophenyl phenyl ether	<10	Naphthalene
<10	2-Chloronaphthalene	<10	Nitrobenzene
<10	4-Chlorophenyl phenyl ether	<10	N-nitrosodimethylamine
<10	Chrysene	<10	N-nitrosodiphenylamine
<10	Dibenzo(a,h)anthracene	<10	N-Nitrosodi-n-propylamine
<10	Di-n-butylphthalate	<10	Phenanthrene
<10	1,3-Dichlorobenzene	<10	Pyrene
<10	1,2-Dichlorobenzene	<10	1,2,4-Trichlorobenzene
<10	1,4-Dichlorobenzene		

DIOXIN

<15	2,3,7,8-Tetrachlorodibenzo-p-dioxin

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18100

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-1

Date Taken: 5/23/85 1305

Date Received: 5/24/85 1750

METHOD 624

VOLATILE COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acrolein	28.9	1,2-trans-dichloroethylene
<10	Acrylonitrile	<1	1,2-Dichloropropane
<1	Benzene	<1	1,3-Dichloropropylene
<1	Carbon tetrachloride	<1	Ethyl benzene
6.3	Chlorobenzene	<5	Methylene Chloride
1.9	1,2-Dichloroethane	<20	Methyl chloride
<1	1,1,1-Trichloroethane	<20	Methyl bromide
29.1	1,1-Dichloroethane	<1	Bromoform
<1	1,1,2-Trichloroethane	<1	Dichlorobromomethane
<1	1,1,2,2-Tetrachloroethane	<1	Chlorodibromomethane
<20	Chloroethane	8.1	Tetrachloroethylene
<1	2-Chloroethylvinyl ether	<1	Toluene
<1	Chloroform	24.8	Trichloroethylene
<1	1,1-Dichloroethylene	753	Vinyl chloride
		2350	1,2-cis dichloroethylene

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

JRB ASSOCIATES
8400 WESTPARK DRIVE
McLean VA 22102

30 June 1985
Sample No. 18101

SAMPLE DESCRIPTION: Well P-2

Date Taken: 5/23/85 1320

Date Received: 5/24/85 1700

METHOD 625
ACID EXTRACTABLES

ug/L	Compound	ug/L	Compound
<10	2,4,6-Trichlorophenol	<10	4-Nitrophenol
<10	4-Chloro-3-Methylphenol	<25	2,4-Dinitrophenol
<10	2-Chlorophenol	<25	2-Methyl-4,6-dinitrophenol
<10	2,4-Dichlorophenol	<10	Pentachlorophenol
<10	2,4-Dimethylphenol	<10	Phenol
<10	2-Nitrophenol		

PESTICIDES

ug/L	Compound	ug/L	Compound
<0.04	Aldrin	<0.03	alpha-BHC
<0.03	Dieldrin	<0.06	beta-BHC
<0.10	Chlordane	<0.06	gamma-BHC
<0.05	4,4'-DDT	<0.03	delta-BHC
<0.03	4,4'-DDE	<1.0	PCB-1242
<0.04	4,4'-DDD	<1.0	PCB-1254
<0.03	alpha-Endosulfan	<3.0	PCB-1221
<0.04	beta-Endosulfan	<3.0	PCB-1232
<0.04	Endosulfan Sulfate	<1.0	PCB-1248
<0.04	Endrin	<0.3	PCB-1260
<0.08	Endrin Aldehyde	<1.0	PCB-1016
<0.04	Heptachlor	<2.0	Toxaphene
<0.03	Heptachlor Epoxide		

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18101

JRB ASSOCIATES
8400 Westpark Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-2

Date Taken: 5/23/85 1320 Date Received: 5/24/85 1750

BASE/NEUTRAL COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acenaphthene	<25	3,3'-Dichlorobenzidine
<10	Acenaphthylene	<10	Diethyl phthalate
<10	Anthracene	<10	Dimethyl phthalate
<50	Benzidine	<10	2,4-Dinitrotoluene
<10	Benzo(a)anthracene	<10	2,6-Dinitrotoluene
<10	Benzo(b)fluoranthene	<10	Di-n-octylphthalate
<10	Benzo(k)fluoranthene	<10	Fluoranthene
<10	Benzo(a)pyrene	<10	Fluorene
<10	Benzo(ghi)perylene	<10	Hexachlorobenzene
<10	Benzyl butyl phthalate	<10	Hexachlorobutadiene
<10	Bis(2-chloroethyl)ether	<25	Hexachlorocyclopentadiene
<10	Bis(2-chloroethoxy)methane	<10	Hexachloroethane
<10	Bis(2-ethylhexyl)phthalate	<10	Indeno(1,2,3-cd)pyrene
<10	Bis(2-chloroisopropyl)ether	<10	Isophorone
<10	4-Bromophenyl phenyl ether	<10	Naphthalene
<10	2-Chloronaphthalene	<10	Nitrobenzene
<10	4-Chlorophenyl phenyl ether	<10	N-nitrosodimethylamine
<10	Chrysene	<10	N-nitrosodiphenylamine
<10	Dibenzo(a,h)anthracene	<10	N-Nitrosodi-n-propylamine
<10	Di-n-butylphthalate	<10	Phenanthrene
<10	1,3-Dichlorobenzene	<10	Pyrene
<10	1,2-Dichlorobenzene	<10	1,2,4-Trichlorobenzene
<10	1,4-Dichlorobenzene		

DIOXIN

<15	2,3,7,8-Tetrachlorodibenzo-p-dioxin

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18101

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-2

Date Taken: 5/23/85 1320 Date Received: 5/24/85 1750

METHOD 624

VOLATILE COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acrolein	94.4	1,2-trans-dichloroethylene
<10	Acrylonitrile	<1	1,2-Dichloropropane
<1	Benzene	<1	1,3-Dichloropropylene
<1	Carbon tetrachloride	<1	Ethyl benzene
41.1	Chlorobenzene	<5	Methylene Chloride
3.1	1,2-Dichloroethane	<20	Methyl chloride
<1	1,1,1-Trichloroethane	<20	Methyl bromide
57.7	1,1-Dichloroethane	<1	Bromoform
<1	1,1,2-Trichloroethane	<1	Dichlorobromomethane
<1	1,1,2,2-Tetrachloroethane	<1	Chlorodibromomethane
<20	Chloroethane	700	Tetrachloroethylene
<1	2-Chloroethylvinyl ether	2.8	Toluene
<1	Chloroform	2650	Trichloroethylene
34.6	1,1-Dichloroethylene	52.5	Vinyl chloride
		2800	1,2-cis dichloroethylene

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18103

JRB ASSOCIATES
8400 WESTPARK DRIVE
McLean VA 22102

SAMPLE DESCRIPTION: Well P-4

Date Taken: 5/23/85 1335

Date Received: 5/24/85 1700

METHOD 625
ACID EXTRACTABLES

ug/L	Compound
<10	2,4,6-Trichlorophenol
<10	4-Chloro-3-Methylphenol
<10	2-Chlorophenol
<10	2,4-Dichlorophenol
<10	2,4-Dimethylphenol
<10	2-Nitrophenol
<10	4-Nitrophenol
<25	2,4-Dinitrophenol
<25	2-Methyl-4,6-dinitrophenol
<10	Pentachlorophenol
<10	Phenol

PESTICIDES

ug/L	Compound
<0.04	Aldrin
<0.03	Dieldrin
<0.10	Chlordane
<0.05	4,4'-DDT
<0.03	4,4'-DDE
<0.04	4,4'-DDD
<0.03	alpha-Endosulfan
<0.04	beta-Endosulfan
<0.04	Endosulfan Sulfate
<0.04	Endrin
<0.08	Endrin Aldehyde
<0.04	Heptachlor
<0.03	Heptachlor Epoxide
<0.03	alpha-BHC
<0.06	beta-BHC
<0.06	gamma-BHC
<0.03	delta-BHC
<1.0	PCB-1242
<1.0	PCB-1254
<3.0	PCB-1221
<3.0	PCB-1232
<1.0	PCB-1248
<0.3	PCB-1260
<1.0	PCB-1016
<2.0	Toxaphene

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18103

JRB ASSOCIATES
8400 Westpark Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-4

Date Taken: 5/23/85 1335 Date Received: 5/24/85 1750

BASE/NEUTRAL COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acenaphthene	<25	3,3'-Dichlorobenzidine
<10	Acenaphthylene	<10	Diethyl phthalate
<10	Anthracene	<10	Dimethyl phthalate
<50	Benzidine	<10	2,4-Dinitrotoluene
<10	Benzo(a)anthracene	<10	2,6-Dinitrotoluene
<10	Benzo(b)fluoranthene	<10	Di-n-octylphthalate
<10	Benzo(k)fluoranthene	<10	Fluoranthene
<10	Benzo(a)pyrene	<10	Fluorene
<10	Benzo(ghi)perylene	<10	Hexachlorobenzene
<10	Benzyl butyl phthalate	<10	Hexachlorobutadiene
<10	Bis(2-chloroethyl)ether	<25	Hexachlorocyclopentadiene
<10	Bis(2-chloroethoxy)methane	<10	Hexachloroethane
<10	Bis(2-ethylhexyl)phthalate	<10	Indeno(1,2,3-cd)pyrene
<10	Bis(2-chloroisopropyl)ether	<10	Isophorone
<10	4-Bromophenyl phenyl ether	<10	Naphthalene
<10	2-Chloronaphthalene	<10	Nitrobenzene
<10	4-Chlorophenyl phenyl ether	<10	N-nitrosodimethylamine
<10	Chrysene	<10	N-nitrosodiphenylamine
<10	Dibenzo(a,h)anthracene	<10	N-Nitrosodi-n-propylamine
<10	Di-n-butylphthalate	<10	Phenanthrene
<10	1,3-Dichlorobenzene	<10	Pyrene
<10	1,2-Dichlorobenzene	<10	1,2,4-Trichlorobenzene
<10	1,4-Dichlorobenzene		

DIOXIN

<15	2,3,7,8-Tetrachlorodibenzo-p-dioxin

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18103

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-4

Date Taken: 5/23/85 1335

Date Received: 5/24/85 1750

METHOD 624

VOLATILE COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acrolein	<1	1,2-trans-dichloroethylene
<10	Acrylonitrile	<1	1,2-Dichloropropane
<1	Benzene	<1	1,3-Dichloropropylene
<1	Carbon tetrachloride	<1	Ethyl benzene
8.9	Chlorobenzene	<5	Methylene Chloride
1.3	1,2-Dichloroethane	<20	Methyl chloride
1.0	1,1,1-Trichloroethane	<20	Methyl bromide
3.4	1,1-Dichloroethane	<1	Bromoform
<1	1,1,2-Trichloroethane	<1	Dichlorobromomethane
<1	1,1,2,2-Tetrachloroethane	<1	Chlorodibromomethane
<20	Chloroethane	2300	Tetrachloroethylene
<1	2-Chloroethylvinyl ether	4.1	Toluene
<1	Chloroform	1650	Trichloroethylene
4.0	1,1-Dichloroethylene	<20	Vinyl chloride
		1100	1,2-cis dichloroethylene

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18105

JRB ASSOCIATES
8400 WESTPARK DRIVE
McLean VA 22102

SAMPLE DESCRIPTION: Well P-6

Date Taken: 5/23/85 1355 Date Received: 5/24/85 1700

METHOD 625
ACID EXTRACTABLES

ug/L	Compound	ug/L	Compound
<10	2,4,6-Trichlorophenol	<10	4-Nitrophenol
<10	4-Chloro-3-Methylphenol	<25	2,4-Dinitrophenol
<10	2-Chlorophenol	<25	2-Methyl-4,6-dinitrophenol
<10	2,4-Dichlorophenol	<10	Pentachlorophenol
<10	2,4-Dimethylphenol	<10	Phenol
<10	2-Nitrophenol		

PESTICIDES

ug/L	Compound	ug/L	Compound
<0.04	Aldrin	<0.03	alpha-BHC
<0.03	Dieldrin	<0.06	beta-BHC
<0.10	Chlordane	<0.06	gamma-BHC
<0.05	4,4'-DDT	<0.03	delta-BHC
<0.03	4,4'-DDE	<1.0	PCB-1242
<0.04	4,4'-DDD	<1.0	PCB-1254
<0.03	alpha-Endosulfan	<3.0	PCB-1221
<0.04	beta-Endosulfan	<3.0	PCB-1232
<0.04	Endosulfan Sulfate	<1.0	PCB-1248
<0.04	Endrin	<0.3	PCB-1260
<0.08	Endrin Aldehyde	<1.0	PCB-1016
<0.04	Heptachlor	<2.0	Toxaphene
<0.03	Heptachlor Epoxide		

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18105

JRB ASSOCIATES
8400 Westpark Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-6

Date Taken: 5/23/85 1355 Date Received: 5/24/85 1750

BASE/NEUTRAL COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acenaphthene	<25	3,3'-Dichlorobenzidine
<10	Acenaphthylene	<10	Diethyl phthalate
<10	Anthracene	<10	Dimethyl phthalate
<50	Benzidine	<10	2,4-Dinitrotoluene
<10	Benzo(a)anthracene	<10	2,6-Dinitrotoluene
<10	Benzo(b)fluoranthene	<10	Di-n-octylphthalate
<10	Benzo(k)fluoranthene	<10	Fluoranthene
<10	Benzo(a)pyrene	<10	Fluorene
<10	Benzo(ghi)perylene	<10	Hexachlorobenzene
<10	Benzyl butyl phthalate	<10	Hexachlorobutadiene
<10	Bis(2-chloroethyl)ether	<25	Hexachlorocyclopentadiene
<10	Bis(2-chloroethoxy)methane	<10	Hexachloroethane
<10	Bis(2-ethylhexyl)phthalate	<10	Indeno(1,2,3-cd)pyrene
<10	Bis(2-chloroisopropyl)ether	<10	Isophorone
<10	4-Bromophenyl phenyl ether	<10	Naphthalene
<10	2-Chloronaphthalene	<10	Nitrobenzene
<10	4-Chlorophenyl phenyl ether	<10	N-nitrosodimethylamine
<10	Chrysene	<10	N-nitrosodiphenylamine
<10	Dibenzo(a,h)anthracene	<10	N-Nitrosodi-n-propylamine
<10	Di-n-butylphthalate	<10	Phenanthrene
<10	1,3-Dichlorobenzene	<10	Pyrene
<10	1,2-Dichlorobenzene	<10	1,2,4-Trichlorobenzene
<10	1,4-Dichlorobenzene		

DIOXIN

<15	2,3,7,8-Tetrachlorodibenzo-p-dioxin

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18105

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-6

Date Taken: 5/23/85 1355

Date Received: 5/24/85 1750

METHOD 624

VOLATILE COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acrolein	<1	1,2-trans-dichloroethylene
<10	Acrylonitrile	<1	1,2-Dichloropropane
<1	Benzene	<1	1,3-Dichloropropylene
<1	Carbon tetrachloride	<1	Ethyl benzene
16.6	Chlorobenzene	<5	Methylene Chloride
2.4	1,2-Dichloroethane	<20	Methyl chloride
<1	1,1,1-Trichloroethane	<20	Methyl bromide
18.5	1,1-Dichloroethane	<1	Bromoform
<1	1,1,2-Trichloroethane	<1	Dichlorobromomethane
<1	1,1,2,2-Tetrachloroethane	<1	Chlorodibromomethane
<20	Chloroethane	500	Tetrachloroethylene
<1	2-Chloroethylvinyl ether	1.5	Toluene
<1	Chloroform	1100	Trichloroethylene
<1	1,1-Dichloroethylene	499	Vinyl chloride
		850	1,2-cis dichloroethylene

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18107

JRB ASSOCIATES
8400 WESTPARK DRIVE
McLean VA 22102

SAMPLE DESCRIPTION: Well P-8

Date Taken: 5/23/85 1545 Date Received: 5/24/85 1700

METHOD 625
ACID EXTRACTABLES

ug/L	Compound	ug/L	Compound
<10	2,4,6-Trichlorophenol	<10	4-Nitrophenol
<10	4-Chloro-3-Methylphenol	<25	2,4-Dinitrophenol
<10	2-Chlorophenol	<25	2-Methyl-4,6-dinitrophenol
<10	2,4-Dichlorophenol	<10	Pentachlorophenol
<10	2,4-Dimethylphenol	<10	Phenol
<10	2-Nitrophenol		

PESTICIDES

ug/L	Compound	ug/L	Compound
<0.04	Aldrin	<0.03	alpha-BHC
<0.03	Dieldrin	<0.06	beta-BHC
<0.10	Chlordane	<0.06	gamma-BHC
<0.05	4,4'-DDT	<0.03	delta-BHC
<0.03	4,4'-DDE	<1.0	PCB-1242
<0.04	4,4'-DDD	<1.0	PCB-1254
<0.03	alpha-Endosulfan	<3.0	PCB-1221
<0.04	beta-Endosulfan	<3.0	PCB-1232
<0.04	Endosulfan Sulfate	<1.0	PCB-1248
<0.04	Endrin	<0.3	PCB-1260
<0.08	Endrin Aldehyde	<1.0	PCB-1016
<0.04	Heptachlor	<2.0	Toxaphene
<0.03	Heptachlor Epoxide		

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18107

JRB ASSOCIATES
8400 Westpark Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-8

Date Taken: 5/23/85 1545 Date Received: 5/24/85 1750

BASE/NEUTRAL COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acenaphthene	<25	3,3'-Dichlorobenzidine
<10	Acenaphthylene	<10	Diethyl phthalate
<10	Anthracene	<10	Dimethyl phthalate
<50	Benzidine	<10	2,4-Dinitrotoluene
<10	Benzo(a)anthracene	<10	2,6-Dinitrotoluene
<10	Benzo(b)fluoranthene	<10	Di-n-octylphthalate
<10	Benzo(k)fluoranthene	<10	Fluoranthene
<10	Benzo(a)pyrene	<10	Fluorene
<10	Benzo(ghi)perylene	<10	Hexachlorobenzene
<10	Benzyl butyl phthalate	<10	Hexachlorobutadiene
<10	Bis(2-chloroethyl)ether	<25	Hexachlorocyclopentadiene
<10	Bis(2-chloroethoxy)methane	<10	Hexachloroethane
<10	Bis(2-ethylhexyl)phthalate	<10	Indeno(1,2,3-cd)pyrene
<10	Bis(2-chloroisopropyl)ether	<10	Isophorone
<10	4-Bromophenyl phenyl ether	<10	Naphthalene
<10	2-Chloronaphthalene	<10	Nitrobenzene
<10	4-Chlorophenyl phenyl ether	<10	N-nitrosodimethylamine
<10	Chrysene	<10	N-nitrosodiphenylamine
<10	Dibenzo(a,h)anthracene	<10	N-Nitrosodi-n-propylamine
<10	Di-n-butylphthalate	<10	Phenanthrene
<10	1,3-Dichlorobenzene	<10	Pyrene
<10	1,2-Dichlorobenzene	<10	1,2,4-Trichlorobenzene
<10	1,4-Dichlorobenzene		

DIOXIN

<15	2,3,7,8-Tetrachlorodibenzo-p-dioxin

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18107

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-8

Date Taken: 5/23/85 1545 Date Received: 5/24/85 1750

METHOD 624

VOLATILE COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acrolein	21.6	1,2-trans-dichloroethylene
<10	Acrylonitrile	<1	1,2-Dichloropropane
<1	Benzene	<1	1,3-Dichloropropylene
<1	Carbon tetrachloride	<1	Ethyl benzene
52.8	Chlorobenzene	<5	Methylene Chloride
5.7	1,2-Dichloroethane	<20	Methyl chloride
600	1,1,1-Trichloroethane	<20	Methyl bromide
1150	1,1-Dichloroethane	<1	Bromoform
4.7	1,1,2-Trichloroethane	<1	Dichlorobromomethane
<1	1,1,2,2-Tetrachloroethane	<1	Chlorodibromomethane
35.4	Chloroethane	2900	Tetrachloroethylene
<1	2-Chloroethylvinyl ether	2.0	Toluene
[illegible]	Chloroform	3000	Trichloroethylene
<1	1,1-Dichloroethylene	239	Vinyl chloride
		2350	1,2-cis dichloroethylene

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18108

JRB ASSOCIATES
8400 WESTPARK DRIVE
McLean VA 22102

SAMPLE DESCRIPTION: Well P-9

Date Taken: 5/23/85 1425 Date Received: 5/24/85 1700

METHOD 625
ACID EXTRACTABLES

ug/L	Compound	ug/L	Compound
<10	2,4,6-Trichlorophenol	<10	4-Nitrophenol
<10	4-Chloro-3-Methylphenol	<25	2,4-Dinitrophenol
<10	2-Chlorophenol	<25	2-Methyl-4,6-dinitrophenol
<10	2,4-Dichlorophenol	<10	Pentachlorophenol
<10	2,4-Dimethylphenol	<10	Phenol
<10	2-Nitrophenol		

PESTICIDES

ug/L	Compound	ug/L	Compound
<0.04	Aldrin	<0.03	alpha-BHC
<0.03	Dieldrin	<0.06	beta-BHC
<0.10	Chlordane	<0.06	gamma-BHC
<0.05	4,4'-DDT	<0.03	delta-BHC
<0.03	4,4'-DDE	<1.0	PCB-1242
<0.04	4,4'-DDD	<1.0	PCB-1254
<0.03	alpha-Endosulfan	<3.0	PCB-1221
<0.04	beta-Endosulfan	<3.0	PCB-1232
<0.04	Endosulfan Sulfate	<1.0	PCB-1248
<0.04	Endrin	<0.3	PCB-1260
<0.08	Endrin Aldehyde	<1.0	PCB-1016
<0.04	Heptachlor	<2.0	Toxaphene
<0.03	Heptachlor Epoxide		

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18108

JRB ASSOCIATES
8400 Westpark Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-9

Date Taken: 5/23/85 1425 Date Received: 5/24/85 1750

BASE/NEUTRAL COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acenaphthene	<25	3,3'-Dichlorobenzidine
<10	Acenaphthylene	<10	Diethyl phthalate
<10	Anthracene	<10	Dimethyl phthalate
<50	Benzidine	<10	2,4-Dinitrotoluene
<10	Benzo(a)anthracene	<10	2,6-Dinitrotoluene
<10	Benzo(b)fluoranthene	<10	Di-n-octylphthalate
<10	Benzo(k)fluoranthene	<10	Fluoranthene
<10	Benzo(a)pyrene	<10	Fluorene
<10	Benzo(ghi)perylene	<10	Hexachlorobenzene
<10	Benzyl butyl phthalate	<10	Hexachlorobutadiene
<10	Bis(2-chloroethyl)ether	<25	Hexachlorocyclopentadiene
<10	Bis(2-chloroethoxy)methane	<10	Hexachloroethane
<10	Bis(2-ethylhexyl)phthalate	<10	Indeno(1,2,3-cd)pyrene
<10	Bis(2-chloroisopropyl)ether	<10	Isophorone
<10	4-Bromophenyl phenyl ether	<10	Naphthalene
<10	2-Chloronaphthalene	<10	Nitrobenzene
<10	4-Chlorophenyl phenyl ether	<10	N-nitrosodimethylamine
<10	Chrysene	<10	N-nitrosodiphenylamine
<10	Dibenzo(a,h)anthracene	<10	N-Nitrosodi-n-propylamine
<10	Di-n-butylphthalate	<10	Phenanthrene
<10	1,3-Dichlorobenzene	<10	Pyrene
<10	1,2-Dichlorobenzene	<10	1,2,4-Trichlorobenzene
<10	1,4-Dichlorobenzene		

DIOXIN

<15	2,3,7,8-Tetrachlorodibenzo-p-dioxin

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 June 1985
Sample No. 18108

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: Well P-9

Date Taken: 5/23/85 1425

Date Received: 5/24/85 1750

METHOD 624

VOLATILE COMPOUNDS

ug/L	Compound	ug/L	Compound
<10	Acrolein	14.2	1,2-trans-dichloroethylene
<10	Acrylonitrile	<1	1,2-Dichloropropane
2.0	Benzene	<1	1,3-Dichloropropylene
<1	Carbon tetrachloride	<1	Ethyl benzene
2.5	Chlorobenzene	<5	Methylene Chloride
<1	1,2-Dichloroethane	<20	Methyl chloride
<1	1,1,1-Trichloroethane	<20	Methyl bromide
<1	1,1-Dichloroethane	<1	Bromoform
<1	1,1,2-Trichloroethane	<1	Dichlorobromomethane
<1	1,1,2,2-Tetrachloroethane	<1	Chlorodibromomethane
<20	Chloroethane	3650	Tetrachloroethylene
<1	2-Chloroethylvinyl ether	1.9	Toluene
11.8	Chloroform	5050	Trichloroethylene
147	1,1-Dichloroethylene	23.1	Vinyl chloride
		5100	1,2-cis dichloroethylene

Pam Jupe

Pam Jupe

Table A-1. Results of 5/23/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

117 N. FIRST
ANN ARBOR, MICHIGAN 48104 (313) 662-3104

Project: A3254.1
Report Date: 08-23-85

Client P.O. 16-860025-90
Report: 14384

Samples Recvd: 08-09-35
Refer Questions To:
ROBYN WOOLEY

Client:
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
8400 WESTPARK DRIVE
MC LEAN, VA 22102

Approved:

***
Residual Samples Will Be Held
TWO WEEKS
***

Client I.D.: P1
ERG Sample No.: 08/134614
Matrix: NATURAL WATER

Parameter	Result	Units
ACID FRACTION (PRIOR. POLLS. METH 625)		
CHLOROPHENOL, 2-	ND (2)	ug/L
NITROPHENOL, 2-	ND (2)	ug/L
PHENOL	ND (2)	ug/L
DIMETHYLPHENOL, 2,4-	ND (2)	ug/L
DICHLOROPHENOL, 2,4-	ND (2)	ug/L
TRICHLOROPHENOL, 2,4,6-	ND (2)	ug/L
CHLORO-3-METHYLPHENOL, 4-	ND (2)	ug/L
DINITROPHENOL, 2,4-	ND (2)	ug/L
METHYL-4,6-DINITROPHENOL, 2-	ND (2)	ug/L
PENTACHLOROPHENOL	ND (2)	ug/L
NITROPHENOL, 4-	ND (2)	ug/L
ANTIMONY	ND (0.25)	mg/L
ARSENIC, TOTAL	ND (0.001)	mg/L
B/N FRACTION (PRIOR. POLLS METH. 625)		
ACENAPTHENE	ND (2)	ug/L
ACENAPTHYLENE	ND (2)	ug/L
ANTHRACENE	ND (2)	ug/L
BENZIDINE	ND (2)	ug/L
BENZO(A)ANTHRACENE	ND (2)	ug/L
BENZO(A)PYRENE	ND (2)	ug/L
BENZO(B)FLUORANTHENE	ND (2)	ug/L
BENZO(K)FLUORANTHENE	ND (2)	ug/L
BENZO(G,H,I)PERYLENE	ND (2)	ug/L
BIS(2-CHLOROETHYL)ETHER	ND (2)	ug/L
BIS(2-CHLORETHOXY)METHANE	ND (2)	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	ND (2)	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	ND (2)	ug/L
BROMOPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
BUTYL BENZYL PHTHALATE	ND (2)	ug/L
CHLORONAPHTHALENE, 2-	ND (2)	ug/L
CHLOROPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
CHRYSENE	ND (2)	ug/L
DI-N-BUTYLPHTHALATE	ND (2)	ug/L
DIBENZO(A,H)ANTHRACENE	ND (2)	ug/L

Page 1 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P1
ERG Sample No.: 08/134614
Matrix: NATURAL WATER

Parameter	Result	Units
DICHLOROBENZENE, 1,2-	ND (2)	ug/L
DICHLOROBENZENE, 1,3-	ND (2)	ug/L
DICHLOROBENZENE, 1,4-	ND (2)	ug/L
DICHLOROBENZIDINE, 3,3'-	ND (2)	ug/L
DIETHYLPHTHALATE	ND (2)	ug/L
DIMETHYLPHTHALATE	ND (2)	ug/L
DINITROTOLUENE 2,4-	ND (2)	ug/L
DINITROTOLUENE 2,6-	ND (2)	ug/L
DIOCTYLPHTHALATE	ND (2)	ug/L
DIPHENYLHYDRAZINE 1,2-	ND (2)	ug/L
FLUORANTHENE	ND (2)	ug/L
FLUORENE	ND (2)	ug/L
HEXACHLOROBENZENE	ND (2)	ug/L
HEXACHLOROBUTADIENE	ND (2)	ug/L
HEXACHLOROCYCLOPENTADIENE	ND (2)	ug/L
HEXACHLOROETHANE	ND (2)	ug/L
INDENO(1,2,3-CD)PYRENE	ND (2)	ug/L
ISOPHORONE	ND (2)	ug/L
N-NITROSODI-N-PROPYLAMINE	ND (2)	ug/L
N-NITROSODIMETHYLAMINE	ND (2)	ug/L
N-NITROSODIPHENYLAMINE	ND (2)	ug/L
NAPHTHALENE	ND (2)	ug/L
NITROBENZENE	ND (2)	ug/L
PHENANTHRENE	ND (2)	ug/L
PYRENE	ND (2)	ug/L
TRICHLOROBENZENE, 1,2,4-	ND (2)	ug/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L
CHROMIUM, TOTAL	<0.02	mg/L
COPPER	0.32	mg/L
QC SPECIAL SCAN	ND (50)	ug/L
* AVERAGE OF DUPLICATE RUNS		
LEAD, TOTAL	<0.05	mg/L
MERCURY	<0.0002	mg/L
* AVERAGE OF DUPLICATE RUNS		
NICKEL, TOTAL	<0.05	mg/L
SELENIUM, TOTAL	0.001	mg/L
SILVER	ND (0.02)	mg/L
THALLIUM	<0.10	mg/L
* AVERAGE OF DUPLICATE RUNS		
VOLATILE FRACTION (PRIOR POLLS. EPA METH 624)		
BENZENE	ND (50)	ug/L
BROMODICHLOROMETHANE	ND (50)	ug/L
BROMOFORM	ND (50)	ug/L
BROMOMETHANE	ND (50)	ug/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P1
ERG Sample No.: 08/134614
Matrix: NATURAL WATER

Parameter	Result	Units
CARBON TETRACHLORIDE	ND (50)	ug/L
CHLOROBENZENE	ND (50)	ug/L
CHLOROETHANE	ND (50)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (50)	ug/L
CHLOROFORM	ND (50)	ug/L
CHLOROMETHANE	ND (50)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (50)	ug/L
DIBROMOCHLOROMETHANE	ND (50)	ug/L
DICHLOROETHANE, 1,1-	ND (50)	ug/L
DICHLOROETHANE, 1,2-	ND (50)	ug/L
DICHLOROETHENE, 1,1-	ND (50)	ug/L
DICHLOROPROPANE, 1,2-	ND (50)	ug/L
ETHYLBENZENE	ND (50)	ug/L
METHYLENE CHLORIDE	ND (50)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (50)	ug/L
TETRACHLOROETHENE	630	ug/L
TOLUENE	ND (50)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (50)	ug/L
TRANS-1,2-DICHLOROETHYLENE	3700	ug/L
TRICHLOROETHANE, 1,1,1-	ND (50)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (50)	ug/L
TRICHLOROETHENE	660	ug/L
TRICHLOROFLUOROMETHANE	ND (50)	ug/L
VINYL CHLORIDE	340	ug/L
ZINC	1.0	mg/L

Client I.D.: P2
ERG Sample No.: 08/134615
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	ND (50)	ug/L

Client I.D.: P4
ERG Sample No.: 08/134616
Matrix: NATURAL WATER

Parameter	Result	Units
ACID FRACTION (PRIOR. POLLS. METH 625)		
CHLOROPHENOL, 2-	ND (2)	ug/L
NITROPHENOL, 2-	ND (2)	ug/L
PHENOL	ND (2)	ug/L
DIMETHYLPHENOL, 2,4-	ND (2)	ug/L
DICHLOROPHENOL, 2,4-	ND (2)	ug/L
TRICHLOROPHENOL, 2,4,6-	ND (2)	ug/L

See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P4
ERG Sample No.: 08/134616
Matrix: NATURAL WATER

Parameter	Result	Units
CHLORO-3-METHYLPHENOL, 4-	ND (2)	ug/L
DINITROPHENOL, 2,4-	ND (2)	ug/L
METHYL-4,6-DINITROPHENOL, 2-	ND (2)	ug/L
PENTACHLOROPHENOL	ND (2)	ug/L
NITROPHENOL, 4-	ND (2)	ug/L
ANTIMONY	ND (0.25)	mg/L
* AVERAGE OF DUPLICATE RUNS		
ARSENIC, TOTAL	<0.001	mg/L
B/N FRACTION (PRIOR. POLLS METH. 625)		
ACENAPTHENE	ND (2)	ug/L
ACENAPTHYLENE	ND (2)	ug/L
ANTHRACENE	ND (2)	ug/L
BENZIDINE	ND (2)	ug/L
BENZO(A)ANTHRACENE	ND (2)	ug/L
BENZO(A)PYRENE	ND (2)	ug/L
BENZO(B)FLUORANTHENE	ND (2)	ug/L
BENZO(K)FLUORANTHENE	ND (2)	ug/L
BENZO(G,H,I)PERYLENE	ND (2)	ug/L
BIS(2-CHLOROETHYL)ETHER	ND (2)	ug/L
BIS(2-CHLORETHOXY)METHANE	ND (2)	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	ND (2)	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	ND (2)	ug/L
BROMOPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
BUTYL BENZYL PHTHALATE	ND (2)	ug/L
CHLORONAPHTHALENE, 2-	ND (2)	ug/L
CHLOROPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
CHRYSENE	ND (2)	ug/L
DI-N-BUTYLPHTHALATE	ND (2)	ug/L
DIBENZO(A,H)ANTHRACENE	ND (2)	ug/L
DICHLOROBENZENE, 1,2-	ND (2)	ug/L
DICHLOROBENZENE, 1,3-	ND (2)	ug/L
DICHLOROBENZENE, 1,4-	ND (2)	ug/L
DICHLOROBENZIDINE, 3,3'-	ND (2)	ug/L
DIETHYLPHTHALATE	ND (2)	ug/L
DIMETHYLPHTHALATE	ND (2)	ug/L
DINITROTOLUENE 2,4-	ND (2)	ug/L
DINITROTOLUENE 2,6-	ND (2)	ug/L
DIOCTYLPHTHALATE	ND (2)	ug/L
DIPHENYLHYDRAZINE 1,2-	ND (2)	ug/L
FLUORANTHENE	ND (2)	ug/L
FLUORENE	ND (2)	ug/L
HEXACHLOROBENZENE	ND (2)	ug/L
HEXACHLOROBUTADIENE	ND (2)	ug/L
HEXACHLOROCYCLOPENTADIENE	ND (2)	ug/L
HEXACHLOROETHANE	ND (2)	ug/L
INDENO(1,2,3-CD)PYRENE	ND (2)	ug/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P4
ERG Sample No.: 08/134616
Matrix: NATURAL WATER

Parameter	Result	Units
ISOPHORONE	ND (2)	ug/L
N-NITROSODI-N-PROPYLAMINE	ND (2)	ug/L
N-NITROSODIMETHYLAMINE	ND (2)	ug/L
N-NITROSODIPHENYLAMINE	ND (2)	ug/L
NAPHTHALENE	ND (2)	ug/L
NITROBENZENE	ND (2)	ug/L
PHENANTHRENE	ND (2)	ug/L
PYRENE	ND (2)	ug/L
TRICHLOROBENZENE, 1,2,4-	ND (2)	ug/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
* AVERAGE OF DUPLICATE RUNS		
CADMIUM, TOTAL	ND (0.01)	mg/L
* AVERAGE OF DUPLICATE RUNS		
CHROMIUM, TOTAL	0.10	mg/L
* AVERAGE OF DUPLICATE RUNS		
COPPER	0.03	mg/L
* AVERAGE OF DUPLICATE RUNS		
QC SPECIAL SCAN	6800	ug/L
LEAD, TOTAL	ND (0.05)	mg/L
* AVERAGE OF DUPLICATE RUNS		
MERCURY	<0.0002	mg/L
NICKEL, TOTAL	<0.05	mg/L
* AVERAGE OF DUPLICATE RUNS		
SELENIUM, TOTAL	<0.001	mg/L
SILVER	ND (0.02)	mg/L
* AVERAGE OF DUPLICATE RUNS		
THALLIUM	ND (0.10)	mg/L
* AVERAGE OF DUPLICATE RUNS		
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (50)	ug/L
BROMODICHLOROMETHANE	ND (50)	ug/L
BROMOFORM	ND (50)	ug/L
BROMOMETHANE	ND (50)	ug/L
CARBON TETRACHLORIDE	ND (50)	ug/L
CHLOROBENZENE	ND (50)	ug/L
CHLOROETHANE	ND (50)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (50)	ug/L
CHLOROFORM	ND (50)	ug/L
CHLOROMETHANE	ND (50)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (50)	ug/L
DIBROMOCHLOROMETHANE	ND (50)	ug/L
DICHLOROETHANE, 1,1-	ND (50)	ug/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

Client I.D.: P4
ERG Sample No.: 08/134616
Matrix: NATURAL WATER

Parameter	Result	Units
DICHLOROETHANE, 1,2-	ND (50)	ug/L
DICHLOROETHENE, 1,1-	ND (50)	ug/L
DICHLOROPROPANE, 1,2-	ND (50)	ug/L
ETHYLBENZENE	ND (50)	ug/L
METHYLENE CHLORIDE	ND (50)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (50)	ug/L
TETRACHLOROETHENE	4000	ug/L
TOLUENE	ND (50)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (50)	ug/L
TRANS-1,2-DICHLOROETHYLENE	950	ug/L
TRICHLOROETHANE, 1,1,1-	ND (50)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (50)	ug/L
TRICHLOROETHENE	2600	ug/L
TRICHLOROFLUOROMETHANE	ND (50)	ug/L
VINYL CHLORIDE	ND (50)	ug/L
ZINC	<0.02	mg/L

* AVERAGE OF DUPLICATE RUNS

Client I.D.: P6
ERG Sample No.: 08/134617
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	ND (50)	ug/L

Client I.D.: P8
ERG Sample No.: 08/134618
Matrix: NATURAL WATER

Parameter	Result	Units
ACID FRACTION (PRIOR. POLLS. METH 625)		
CHLOROPHENOL, 2-	ND (2)	ug/L
NITROPHENOL, 2-	ND (2)	ug/L
PHENOL	ND (2)	ug/L
DIMETHYLPHENOL, 2,4-	ND (2)	ug/L
DICHLOROPHENOL, 2,4-	ND (2)	ug/L
TRICHLOROPHENOL, 2,4,6-	ND (2)	ug/L
CHLORO-3-METHYLPHENOL, 4-	ND (2)	ug/L
DINITROPHENOL, 2,4-	ND (2)	ug/L
METHYL-4,6-DINITROPHENOL, 2-	ND (2)	ug/L
PENTACHLOROPHENOL	ND (2)	ug/L
NITROPHENOL, 4-	ND (2)	ug/L
ANTIMONY	ND (0.25)	mg/L
ARSENIC, TOTAL	0.033	mg/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P8
ERG Sample No.: 08/134618
Matrix: NATURAL WATER

Parameter	Result	Units
B/N FRACTION (PRIOR. POLLS METH. 625)		
ACENAPTHENE	ND (2)	ug/L
ACENAPTHYLENE	ND (2)	ug/L
ANTHRACENE	ND (2)	ug/L
BENZIDINE	ND (2)	ug/L
BENZO(A)ANTHRACENE	ND (2)	ug/L
BENZO(A)PYRENE	ND (2)	ug/L
BENZO(B)FLUORANTHENE	ND (2)	ug/L
BENZO(K)FLUORANTHENE	ND (2)	ug/L
BENZO(G,H,I)PERYLENE	ND (2)	ug/L
BIS(2-CHLOROETHYL)ETHER	ND (2)	ug/L
BIS(2-CHLORETHOXY)METHANE	ND (2)	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	ND (2)	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	ND (2)	ug/L
BROMOPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
BUTYL BENZYL PHTHALATE	ND (2)	ug/L
CHLORONAPHTHALENE, 2-	ND (2)	ug/L
CHLOROPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
CHRYSENE	ND (2)	ug/L
DI-N-BUTYLPHTHALATE	ND (2)	ug/L
DIBENZO(A,H)ANTHRACENE	ND (2)	ug/L
DICHLOROBENZENE, 1,2-	ND (2)	ug/L
DICHLOROBENZENE, 1,3-	ND (2)	ug/L
DICHLOROBENZENE, 1,4-	ND (2)	ug/L
DICHLOROBENZIDINE, 3,3'-	ND (2)	ug/L
DIETHYLPHTHALATE	ND (2)	ug/L
DIMETHYLPHTHALATE	ND (2)	ug/L
DINITROTOLUENE 2,4-	ND (2)	ug/L
DINITROTOLUENE 2,6-	ND (2)	ug/L
DIOCTYLPHTHALATE	ND (2)	ug/L
DIPHENYLHYDRAZINE 1,2-	ND (2)	ug/L
FLUORANTHENE	ND (2)	ug/L
FLUORENE	ND (2)	ug/L
HEXACHLOROBENZENE	ND (2)	ug/L
HEXACHLOROBUTADIENE	ND (2)	ug/L
HEXACHLOROCYCLOPENTADIENE	ND (2)	ug/L
HEXACHLOROETHANE	ND (2)	ug/L
INDENO(1,2,3-CD)PYRENE	ND (2)	ug/L
ISOPHORONE	ND (2)	ug/L
N-NITROSODI-N-PROPYLAMINE	ND (2)	ug/L
N-NITROSODIMETHYLAMINE	ND (2)	ug/L
N-NITROSODIPHENYLAMINE	ND (2)	ug/L
NAPHTHALENE	ND (2)	ug/L
NITROBENZENE	ND (2)	ug/L
PHENANTHRENE	ND (2)	ug/L
PYRENE	ND (2)	ug/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P8
ERG Sample No.: 08/134618
Matrix: NATURAL WATER

Parameter	Result	Units
TRICHLOROBENZENE, 1,2,4-	ND (2)	ug/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	ND (0.01)	mg/L
CHROMIUM, TOTAL	ND (0.02)	mg/L
COPPER	0.04	mg/L
GC SPECIAL SCAN	ND (50)	ug/L
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	ND (0.05)	mg/L
SELENIUM, TOTAL	0.015	mg/L
SILVER	<0.02	mg/L
THALLIUM	<0.10	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (1)	ug/L
BROMODICHLOROMETHANE	ND (1)	ug/L
BROMOFORM	ND (1)	ug/L
BROMOMETHANE	ND (1)	ug/L
CARBON TETRACHLORIDE	ND (1)	ug/L
CHLOROBENZENE	60	ug/L
CHLOROETHANE	21	ug/L
CHLOROETHYLVINYLETHER, 2	ND (1)	ug/L
CHLOROFORM	ND (1)	ug/L
CHLOROMETHANE	ND (1)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (1)	ug/L
DIBROMOCHLOROMETHANE	ND (1)	ug/L
DICHLOROETHANE, 1,1-	700	ug/L
DICHLOROETHANE, 1,2-	ND (1)	ug/L
DICHLOROETHENE, 1,1-	220	ug/L
DICHLOROPROPANE, 1,2-	ND (1)	ug/L
ETHYLBENZENE	ND (1)	ug/L
METHYLENE CHLORIDE	ND (1)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (1)	ug/L
TETRACHLOROETHENE	290	ug/L
TOLUENE	ND (1)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (1)	ug/L
TRANS-1,2-DICHLOROETHYLENE	1100	ug/L
TRICHLOROETHANE, 1,1,1-	440	ug/L
TRICHLOROETHANE, 1,1,2-	ND (1)	ug/L
TRICHLOROETHENE	710	ug/L
TRICHLOROFLUOROMETHANE	ND (1)	ug/L
VINYL CHLORIDE	360	ug/L
ZINC	ND (0.02)	mg/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P9
ERG Sample No.: 08/134619
Matrix: NATURAL WATER

Parameter	Result	Units
ACID FRACTION (PRIOR. POLLS. METH 625)		
CHLOROPHENOL, 2-	ND (2)	ug/L
NITROPHENOL, 2-	ND (2)	ug/L
PHENOL	ND (2)	ug/L
DIMETHYLPHENOL, 2,4-	ND (2)	ug/L
DICHLOROPHENOL, 2,4-	ND (2)	ug/L
TRICHLOROPHENOL, 2,4,6-	ND (2)	ug/L
CHLORO-3-METHYLPHENOL, 4-	ND (2)	ug/L
DINITROPHENOL, 2,4-	ND (2)	ug/L
METHYL-4,6-DINITROPHENOL, 2-	ND (2)	ug/L
PENTACHLOROPHENOL	ND (2)	ug/L
NITROPHENOL, 4-	ND (2)	ug/L
ANTIMONY	ND (0.25)	mg/L
ARSENIC, TOTAL	0.050	mg/L
B/N FRACTION (PRIOR. POLLS METH. 625)		
ACENAPTHENE	ND (2)	ug/L
ACENAPTHYLENE	ND (2)	ug/L
ANTHRACENE	ND (2)	ug/L
BENZIDINE	ND (2)	ug/L
BENZO(A)ANTHRACENE	ND (2)	ug/L
BENZO(A)PYRENE	ND (2)	ug/L
BENZO(B)FLUORANTHENE	ND (2)	ug/L
BENZO(K)FLUORANTHENE	ND (2)	ug/L
BENZO(G,H,I)PERYLENE	ND (2)	ug/L
BIS(2-CHLOROETHYL)ETHER	ND (2)	ug/L
BIS(2-CHLORETHOXY)METHANE	ND (2)	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	ND (2)	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	ND (2)	ug/L
BROMOPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
BUTYL BENZYL PHTHALATE	ND (2)	ug/L
CHLORONAPHTHALENE, 2-	ND (2)	ug/L
CHLOROPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
CHRYSENE	ND (2)	ug/L
DI-N-BUTYLPHTHALATE	ND (2)	ug/L
DIBENZO(A,H)ANTHRACENE	ND (2)	ug/L
DICHLOROBENZENE, 1,2-	ND (2)	ug/L
DICHLOROBENZENE, 1,3-	ND (2)	ug/L
DICHLOROBENZENE, 1,4-	ND (2)	ug/L
DICHLOROBENZIDINE, 3,3'-	ND (2)	ug/L
DIETHYLPHTHALATE	ND (2)	ug/L
DIMETHYLPHTHALATE	ND (2)	ug/L
DINITROTOLUENE 2,4-	ND (2)	ug/L
DINITROTOLUENE 2,6-	ND (2)	ug/L
DIOCTYLPHTHALATE	ND (2)	ug/L
DIPHENYLHYDRAZINE 1,2-	ND (2)	ug/L
FLUORANTHENE	ND (2)	ug/L
FLUORENE	ND (2)	ug/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

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ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P9
ERG Sample No.: 08/134619
Matrix: NATURAL WATER

Parameter	Result	Units
HEXACHLOROBENZENE	ND (2)	ug/L
HEXACHLOROBUTADIENE	ND (2)	ug/L
HEXACHLOROCYCLOPENTADIENE	ND (2)	ug/L
HEXACHLOROETHANE	ND (2)	ug/L
INDENO(1,2,3-CD)PYRENE	ND (2)	ug/L
ISOPHORONE	ND (2)	ug/L
N-NITROSODI-N-PROPYLAMINE	ND (2)	ug/L
N-NITROSODIMETHYLAMINE	ND (2)	ug/L
N-NITROSODIPHENYLAMINE	ND (2)	ug/L
NAPHTHALENE	ND (2)	ug/L
NITROBENZENE	ND (2)	ug/L
PHENANTHRENE	ND (2)	ug/L
PYRENE	ND (2)	ug/L
TRICHLOROBENZENE, 1,2,4-	ND (2)	ug/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	<0.01	mg/L
CHROMIUM, TOTAL	<0.02	mg/L
COPPER	0.07	mg/L
GC SPECIAL SCAN	580	ug/L
LEAD, TOTAL	ND (0.05)	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	ND (0.05)	mg/L
SELENIUM, TOTAL	0.005	mg/L
SILVER	ND (0.02)	mg/L
THALLIUM	ND (0.10)	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (2)	ug/L
BROMODICHLOROMETHANE	ND (2)	ug/L
BROMOFORM	ND (2)	ug/L
BROMOMETHANE	ND (2)	ug/L
CARBON TETRACHLORIDE	ND (2)	ug/L
CHLOROBENZENE	35	ug/L
CHLOROETHANE	ND (2)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (2)	ug/L
CHLOROFORM	ND (2)	ug/L
CHLOROMETHANE	ND (2)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (2)	ug/L
DIBROMOCHLOROMETHANE	ND (2)	ug/L
DICHLOROETHANE, 1,1-	21	ug/L
DICHLOROETHANE, 1,2-	ND (2)	ug/L
DICHLOROETHENE, 1,1-	15	ug/L
DICHLOROPROPANE, 1,2-	ND (2)	ug/L
ETHYLBENZENE	ND (2)	ug/L
METHYLENE CHLORIDE	ND (2)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (2)	ug/L
TETRACHLOROETHENE	2000	ug/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

Client I.D.: P9
ERG Sample No.: 08/134619
Matrix: NATURAL WATER

Parameter	Result	Units
TOLUENE	ND (2)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (2)	ug/L
TRANS-1,2-DICHLOROETHYLENE	3600	ug/L
TRICHLOROETHANE, 1,1,1-	ND (2)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (2)	ug/L
TRICHLOROETHENE	2000	ug/L
TRICHLOROFLUOROMETHANE	ND (2)	ug/L
VINYL CHLORIDE	520	ug/L
ZINC	ND (0.02)	mg/L

Client I.D.: I1
ERG Sample No.: 08/134620
Matrix: NATURAL WATER

Parameter	Result	Units
GC SPECIAL SCAN	150	ug/L

Client I.D.: I3
ERG Sample No.: 08/134621
Matrix: NATURAL WATER

Parameter	Result	Units
GC SPECIAL SCAN	1400	ug/L

Client I.D.: I4
ERG Sample No.: 08/134622
Matrix: NATURAL WATER

Parameter	Result	Units
GC SPECIAL SCAN	730000	ug/L

Client I.D.: M2
ERG Sample No.: 08/134623
Matrix: NATURAL WATER

Parameter	Result	Units
GC SPECIAL SCAN	4700000	ug/L

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P9R
ERG Sample No.: 08/134624
Matrix: NATURAL WATER

Parameter	Result	Units
ACID FRACTION (PRIOR. POLLS. METH 625)		
CHLOROPHENOL, 2-	ND (2)	ug/L
NITROPHENOL, 2-	ND (2)	ug/L
PHENOL	ND (2)	ug/L
DIMETHYLPHENOL, 2,4-	ND (2)	ug/L
DICHLOROPHENOL, 2,4-	ND (2)	ug/L
TRICHLOROPHENOL, 2,4,6-	ND (2)	ug/L
CHLORO-3-METHYLPHENOL, 4-	ND (2)	ug/L
DINITROPHENOL, 2,4-	ND (2)	ug/L
METHYL-4,6-DINITROPHENOL, 2-	ND (2)	ug/L
PENTACHLOROPHENOL	ND (2)	ug/L
NITROPHENOL, 4-	ND (2)	ug/L
ANTIMONY	ND (0.25)	mg/L
* AVERAGE OF DUPLICATE RUNS		
ARSENIC, TOTAL	0.050	mg/L
B/N FRACTION (PRIOR. POLLS METH. 625)		
ACENAPTHENE	ND (2)	ug/L
ACENAPTHYLENE	ND (2)	ug/L
ANTHRACENE	ND (2)	ug/L
BENZIDINE	ND (2)	ug/L
BENZO(A)ANTHRACENE	ND (2)	ug/L
BENZO(A)PYRENE	ND (2)	ug/L
BENZO(B)FLUORANTHENE	ND (2)	ug/L
BENZO(K)FLUORANTHENE	ND (2)	ug/L
BENZO(G,H,I)PERYLENE	ND (2)	ug/L
BIS(2-CHLOROETHYL)ETHER	ND (2)	ug/L
BIS(2-CHLORETHOXY)METHANE	ND (2)	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	ND (2)	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	ND (2)	ug/L
BROMOPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
BUTYL BENZYL PHTHALATE	ND (2)	ug/L
CHLORONAPHTHALENE, 2-	ND (2)	ug/L
CHLOROPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
CHRYSENE	ND (2)	ug/L
DI-N-BUTYLPHTHALATE	ND (2)	ug/L
DIBENZO(A,H)ANTHRACENE	ND (2)	ug/L
DICHLOROBENZENE, 1,2-	ND (2)	ug/L
DICHLOROBENZENE, 1,3-	ND (2)	ug/L
DICHLOROBENZENE, 1,4-	ND (2)	ug/L
DICHLOROBENZIDINE, 3,3'-	ND (2)	ug/L
DIETHYLPHTHALATE	ND (2)	ug/L
DIMETHYLPHTHALATE	ND (2)	ug/L
DINITROTOLUENE 2,4-	ND (2)	ug/L
DINITROTOLUENE 2,6-	ND (2)	ug/L
DIOCTYLPHTHALATE	ND (2)	ug/L
DIPHENYLHYDRAZINE 1,2-	ND (2)	ug/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P9R
ERG Sample No.: 08/134624
Matrix: NATURAL WATER

Parameter	Result	Units
FLUORANTHENE	ND (2)	ug/L
FLUORENE	ND (2)	ug/L
HEXACHLOROBENZENE	ND (2)	ug/L
HEXACHLOROBUTADIENE	ND (2)	ug/L
HEXACHLOROCYCLOPENTADIENE	ND (2)	ug/L
HEXACHLOROETHANE	ND (2)	ug/L
INDENO(1,2,3-CD)PYRENE	ND (2)	ug/L
ISOPHORONE	ND (2)	ug/L
N-NITROSODI-N-PROPYLAMINE	ND (2)	ug/L
N-NITROSODIMETHYLAMINE	ND (2)	ug/L
N-NITROSODIPHENYLAMINE	ND (2)	ug/L
NAPHTHALENE	ND (2)	ug/L
NITROBENZENE	ND (2)	ug/L
PHENANTHRENE	ND (2)	ug/L
PYRENE	ND (2)	ug/L
TRICHLOROBENZENE, 1,2,4-	ND (2)	ug/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
* AVERAGE OF DUPLICATE RUNS		
CADMIUM, TOTAL	<0.01	mg/L
* AVERAGE OF DUPLICATE RUNS		
CHROMIUM, TOTAL	<0.02	mg/L
* AVERAGE OF DUPLICATE RUNS		
COPPER	0.06	mg/L
* AVERAGE OF DUPLICATE RUNS		
LEAD, TOTAL	ND (0.05)	mg/L
* AVERAGE OF DUPLICATE RUNS		
MERCURY	ND (0.0002)	mg/L
* AVERAGE OF DUPLICATE RUNS		
NICKEL, TOTAL	<0.05	mg/L
* AVERAGE OF DUPLICATE RUNS		
SELENIUM, TOTAL	0.019	mg/L
SILVER	<0.02	mg/L
* AVERAGE OF DUPLICATE RUNS		
THALLIUM	<0.10	mg/L
* AVERAGE OF DUPLICATE RUNS		
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (5)	ug/L
BROMODICHLOROMETHANE	ND (5)	ug/L
BROMOFORM	ND (5)	ug/L
BROMOMETHANE	ND (5)	ug/L
CARBON TETRACHLORIDE	ND (5)	ug/L
CHLOROBENZENE	40	ug/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: P9R
ERG Sample No.: 08/134624
Matrix: NATURAL WATER

Parameter	Result	Units
CHLOROETHANE	ND (5)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (5)	ug/L
CHLOROFORM	ND (5)	ug/L
CHLOROMETHANE	ND (5)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (5)	ug/L
DIBROMOCHLOROMETHANE	ND (5)	ug/L
DICHLOROETHANE, 1,1-	ND (5)	ug/L
DICHLOROETHANE, 1,2-	ND (5)	ug/L
DICHLOROETHENE, 1,1-	17	ug/L
DICHLOROPROPANE, 1,2-	ND (5)	ug/L
ETHYLBENZENE	ND (5)	ug/L
METHYLENE CHLORIDE	ND (5)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (5)	ug/L
TETRACHLOROETHENE	2900	ug/L
TOLUENE	ND (5)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (5)	ug/L
TRANS-1,2-DICHLOROETHYLENE	3900	ug/L
TRICHLOROETHANE, 1,1,1-	ND (5)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (5)	ug/L
TRICHLOROETHENE	3700	ug/L
TRICHLOROFLUOROMETHANE	ND (5)	ug/L
VINYL CHLORIDE	600	ug/L
ZINC	ND (0.02)	mg/L

* AVERAGE OF DUPLICATE RUNS

Client I.D.: FIELD BLANK 1
ERG Sample No.: 08/134632
Matrix: NATURAL WATER

Parameter	Result	Units
ACID FRACTION (PRIOR. POLLS. METH 625)		
CHLOROPHENOL, 2-	ND (2)	ug/L
NITROPHENOL, 2-	ND (2)	ug/L
PHENOL	ND (2)	ug/L
DIMETHYLPHENOL, 2,4-	ND (2)	ug/L
DICHLOROPHENOL, 2,4-	ND (2)	ug/L
TRICHLOROPHENOL, 2,4,6-	ND (2)	ug/L
CHLORO-3-METHYLPHENOL, 4-	ND (2)	ug/L
DINITROPHENOL, 2,4-	ND (2)	ug/L
METHYL-4,6-DINITROPHENOL, 2-	ND (2)	ug/L
PENTACHLOROPHENOL	ND (2)	ug/L
NITROPHENOL, 4-	ND (2)	ug/L
ANTIMONY	ND (0.25)	mg/L
ARSENIC, TOTAL	ND (0.001)	mg/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: FIELD BLANK 1
ERG Sample No.: 08/134632
Matrix: NATURAL WATER

Parameter	Result	Units
B/N FRACTION (PRIOR. POLLS METH. 625)		
ACENAPTHENE	ND (2)	ug/L
ACENAPTHYLENE	ND (2)	ug/L
ANTHRACENE	ND (2)	ug/L
BENZIDINE	ND (2)	ug/L
BENZO(A)ANTHRACENE	ND (2)	ug/L
BENZO(A)PYRENE	ND (2)	ug/L
BENZO(B)FLUORANTHENE	ND (2)	ug/L
BENZO(K)FLUORANTHENE	ND (2)	ug/L
BENZO(G,H,I)PERYLENE	ND (2)	ug/L
BIS(2-CHLOROETHYL)ETHER	ND (2)	ug/L
BIS(2-CHLORETHOXY)METHANE	ND (2)	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	ND (2)	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	ND (2)	ug/L
BROMOPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
BUTYL BENZYL PHTHALATE	ND (2)	ug/L
CHLORONAPHTHALENE, 2-	ND (2)	ug/L
CHLOROPHENYL PHENYL ETHER, 4-	ND (2)	ug/L
CHRYSENE	ND (2)	ug/L
DI-N-BUTYLPHTHALATE	ND (2)	ug/L
DIBENZO(A,H)ANTHRACENE	ND (2)	ug/L
DICHLOROBENZENE, 1,2-	ND (2)	ug/L
DICHLOROBENZENE, 1,3-	ND (2)	ug/L
DICHLOROBENZENE, 1,4-	ND (2)	ug/L
DICHLOROBENZIDINE, 3,3'-	ND (2)	ug/L
DIETHYLPHTHALATE	ND (2)	ug/L
DIMETHYLPHTHALATE	ND (2)	ug/L
DINITROTOLUENE 2,4-	ND (2)	ug/L
DINITROTOLUENE 2,6-	ND (2)	ug/L
DIOCTYLPHTHALATE	ND (2)	ug/L
DIPHENYLHYDRAZINE 1,2-	ND (2)	ug/L
FLUORANTHENE	ND (2)	ug/L
FLUORENE	ND (2)	ug/L
HEXACHLOROBENZENE	ND (2)	ug/L
HEXACHLOROBUTADIENE	ND (2)	ug/L
HEXACHLOROCYCLOPENTADIENE	ND (2)	ug/L
HEXACHLOROETHANE	ND (2)	ug/L
INDENO(1,2,3-CD)PYRENE	ND (2)	ug/L
ISOPHORONE	ND (2)	ug/L
N-NITROSODI-N-PROPYLAMINE	ND (2)	ug/L
N-NITROSODIMETHYLAMINE	ND (2)	ug/L
N-NITROSODIPHENYLAMINE	ND (2)	ug/L
NAPHTHALENE	ND (2)	ug/L
NITROBENZENE	ND (2)	ug/L
PHENANTHRENE	ND (2)	ug/L
PYRENE	ND (2)	ug/L

 See last page for explanation of symbols.

Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254.1
Report Date: 08-23-85

Client I.D.: FIELD BLANK 1
ERG Sample No.: 08/134632
Matrix: NATURAL WATER

Parameter	Result	Units
TRICHLOROBENZENE, 1,2,4-	ND (2)	ug/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	<0.01	mg/L
CHROMIUM, TOTAL	ND (0.02)	mg/L
COPPER	<0.02	mg/L
LEAD, TOTAL	ND (0.05)	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.02	mg/L
THALLIUM	<0.10	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (1)	ug/L
BROMODICHLOROMETHANE	ND (1)	ug/L
BROMOFORM	ND (1)	ug/L
BROMOMETHANE	ND (1)	ug/L
CARBON TETRACHLORIDE	ND (1)	ug/L
CHLOROBENZENE	ND (1)	ug/L
CHLOROETHANE	ND (1)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (1)	ug/L
CHLOROFORM	ND (1)	ug/L
CHLOROMETHANE	ND (1)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (1)	ug/L
DIBROMOCHLOROMETHANE	ND (1)	ug/L
DICHLOROETHANE, 1,1-	ND (1)	ug/L
DICHLOROETHANE, 1,2-	ND (1)	ug/L
DICHLOROETHENE, 1,1-	ND (1)	ug/L
DICHLOROPROPANE, 1,2-	ND (1)	ug/L
ETHYLBENZENE	ND (1)	ug/L
METHYLENE CHLORIDE	ND (1)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (1)	ug/L
TETRACHLOROETHENE	ND (1)	ug/L
TOLUENE	ND (1)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (1)	ug/L
TRANS-1,2-DICHLOROETHYLENE	ND (1)	ug/L
TRICHLOROETHANE, 1,1,1-	ND (1)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (1)	ug/L
TRICHLOROETHENE	ND (1)	ug/L
TRICHLOROFLUOROMETHANE	ND (1)	ug/L
VINYL CHLORIDE	ND (1)	ug/L
ZINC	ND (0.02)	mg/L

SD-Sample damaged
FR-See field report for result
SR-See attached report
NA-Result not applicable to test

ND-Nondetected, Detection limit in ()
<-Positive result at an unquantifiable concentration below indicated level

Thank you for your business.

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Table A-2. Results of 8/8/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

117 N. FIRST
ANN ARBOR, MICHIGAN 48104 (313) 662-3104

Project: A3385
Report Date: 10-15-85

Client P.O. 16-860025-90
Report: 14888

Samples Recvd: 09-13-85
Refer Questions To:
ROBYN WOOLEY

Client:
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
8400 WESTPARK DRIVE
MC LEAN, VA 22102

Approved: _____

***
Residual Samples Will Be Held
TWO WEEKS
***

Client I.D.: I-1
ERG Sample No.: 09/136660
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	ND (50)	ug/L

AVERAGE OF DUPLICATE RUNS

Client I.D.: I-3
ERG Sample No.: 09/136661
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	1700	ug/L

Client I.D.: I-4
ERG Sample No.: 09/136662
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	ND (50)	ug/L

Client I.D.: P-4
ERG Sample No.: 09/136663
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	49000	ug/L

Client I.D.: P-8
ERG Sample No.: 09/136664
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	280000	ug/L

 See last page for explanation of symbols.

Table A-3. Results of 9/13/85 Groundwater Sampling

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3385
Report Date: 10-15-85

Client I.D.: P-9
ERG Sample No.: 09/136665
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	ND (50)	ug/L

Client I.D.: M-1
ERG Sample No.: 09/136666
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	ND (50)	ug/L

Client I.D.: M-2
ERG Sample No.: 09/136667
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	18000	ug/L

Client I.D.: M-2 REP-03
ERG Sample No.: 09/136668
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	21000	ug/L

Client I.D.: BAILER WASH-02
ERG Sample No.: 09/136669
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	15000	ug/L

Client I.D.: CC
ERG Sample No.: 09/136670
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	ND (50)	ug/L

 See last page for explanation of symbols.

Table A-3. Results of 9/13/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3385
Report Date: 10-15-85

Client I.D.: BLANK-01
ERG Sample No.: 09/136671
Matrix: NATURAL WATER

Parameter	Result	Units
QC SPECIAL SCAN	ND (50)	ug/L

Project Notes: THE SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.

SD-Sample damaged
FR-See field report for result
SR-See attached report
NA-Result not applicable to test

ND-Nondetected, Detection limit in ()
<-Positive result at an unquantifiable concentration below indicated level

Thank you for your business. Page 3 Last Page

Table A-3. Results of 9/13/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: SB-8 (21-23)
ERG Sample No.: 12/141897
Matrix: SEDIMENT

Parameter	Result	Units
CHLOROMETHANE	ND (10)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (10)	ug/Kg
DIBROMOCHLOROMETHANE	ND (10)	ug/Kg
DICHLOROETHANE, 1,1-	ND (10)	ug/Kg
DICHLOROETHANE, 1,2-	ND (10)	ug/Kg
DICHLOROETHENE, 1,1-	ND (10)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (10)	ug/Kg
ETHYLBENZENE	ND (10)	ug/Kg
METHYLENE CHLORIDE	30	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	ND (10)	ug/Kg
TETRACHLOROETHENE	ND (10)	ug/Kg
TOLUENE	ND (10)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (10)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND (10)	ug/Kg
TRICHLOROETHANE, 1,1,1-	ND (10)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND (10)	ug/Kg
TRICHLOROETHENE	ND (10)	ug/Kg
TRICHLOROFLUOROMETHANE	ND (10)	ug/Kg
VINYL CHLORIDE	20	mg/Kg
ZINC		
AVERAGE OF DUPLICATE RUNS		

Client I.D.: P-1
ERG Sample No.: 12/141898
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	<0.12	mg/L
AVERAGE OF DUPLICATE RUNS		
ARSENIC, TOTAL	<0.001	mg/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
AVERAGE OF DUPLICATE RUNS		
CADMIUM, TOTAL	ND (0.01)	mg/L
AVERAGE OF DUPLICATE RUNS		
ORGANIC CARBON, TOTAL	3	mg/L
CHROMIUM, TOTAL	<0.02	mg/L
AVERAGE OF DUPLICATE RUNS		
COPPER	0.21	mg/L
AVERAGE OF DUPLICATE RUNS		
QC SPECIAL SCAN	ND (0.05)	mg/L
LEAD, TOTAL	<0.05	mg/L
AVERAGE OF DUPLICATE RUNS		

Page 7 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: P-1
ERG Sample No.: 12/141898
Matrix: NATURAL WATER

Parameter	Result	Units
MERCURY	ND (0.0002)	mg/L
AVERAGE OF DUPLICATE RUNS		
NICKEL, TOTAL	<0.05	mg/L
AVERAGE OF DUPLICATE RUNS		
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.02	mg/L
AVERAGE OF DUPLICATE RUNS		
THALLIUM	<0.05	mg/L
AVERAGE OF DUPLICATE RUNS		
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (100)	ug/L
BROMODICHLOROMETHANE	ND (100)	ug/L
BROMOFORM	ND (100)	ug/L
BROMOMETHANE	ND (100)	ug/L
CARBON TETRACHLORIDE	ND (100)	ug/L
CHLOROBENZENE	ND (100)	ug/L
CHLOROETHANE	ND (100)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (100)	ug/L
CHLOROFORM	ND (100)	ug/L
CHLOROMETHANE	ND (100)	ug/L
CIS-1, 3-DICHLOROPROPENE	ND (100)	ug/L
DIBROMOCHLOROMETHANE	ND (100)	ug/L
DICHLOROETHANE, 1, 1-	ND (100)	ug/L
DICHLOROETHANE, 1, 2-	ND (100)	ug/L
DICHLOROETHENE, 1, 1-	ND (100)	ug/L
DICHLOROPROPANE, 1, 2-	ND (100)	ug/L
ETHYLBENZENE	ND (100)	ug/L
METHYLENE CHLORIDE	360	ug/L
TETRACHLOROETHANE, 1, 1, 2, 2-	ND (100)	ug/L
TETRACHLOROETHENE	ND (100)	ug/L
TOLUENE	ND (100)	ug/L
TRANS-1, 3-DICHLOROPROPENE	ND (100)	ug/L
TRANS-1, 2-DICHLOROETHYLENE	560	ug/L
TRICHLOROETHANE, 1, 1, 1-	ND (100)	ug/L
TRICHLOROETHANE, 1, 1, 2-	ND (100)	ug/L
TRICHLOROETHENE	ND (100)	ug/L
TRICHLOROFLUOROMETHANE	ND (100)	ug/L
VINYL CHLORIDE	ND (100)	ug/L
ZINC	0.70	mg/L
AVERAGE OF DUPLICATE RUNS		

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: P-2
ERG Sample No.: 12/141899
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	<0.12	mg/L
ARSENIC, TOTAL	0.007	mg/L
AVERAGE OF DUPLICATE RUNS		
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	<0.01	mg/L
ORGANIC CARBON, TOTAL	6	mg/L
CHROMIUM, TOTAL	<0.02	mg/L
COPPER	0.38	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	2	mg/L
SELENIUM, TOTAL	<0.001	mg/L
AVERAGE OF DUPLICATE RUNS		
SILVER	<0.02	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (100)	ug/L
BROMODICHLOROMETHANE	ND (100)	ug/L
BROMOFORM	ND (100)	ug/L
BROMOMETHANE	ND (100)	ug/L
CARBON TETRACHLORIDE	ND (100)	ug/L
CHLOROBENZENE	ND (100)	ug/L
CHLOROETHANE	ND (100)	ug/L
CHLOROETHYLVINYLETHER, 2	ND 100)	ug/L
CHLOROFORM	ND 100)	ug/L
CHLOROMETHANE	ND 100)	ug/L
CIS-1, 3-DICHLOROPROPENE	ND 100)	ug/L
DIBROMOCHLOROMETHANE	ND 100)	ug/L
DICHLOROETHANE, 1, 1-	ND (100)	ug/L
DICHLOROETHANE, 1, 2-	ND (100)	ug/L
DICHLOROETHENE, 1, 1-	ND (100)	ug/L
DICHLOROPROPANE, 1, 2-	ND (100)	ug/L
ETHYLBENZENE	ND (100)	ug/L
METHYLENE CHLORIDE	360	ug/L
TETRACHLOROETHANE, 1, 1, 2, 2-	ND (100)	ug/L
TETRACHLOROETHENE	130	ug/L
TOLUENE	ND (100)	ug/L
TRANS-1, 3-DICHLOROPROPENE	ND (100)	ug/L
TRANS-1, 2-DICHLOROETHYLENE	1000	ug/L
TRICHLOROETHANE, 1, 1, 1-	ND (100)	ug/L
TRICHLOROETHANE, 1, 1, 2-	ND (100)	ug/L
TRICHLOROETHENE	520	ug/L
TRICHLOROFLUOROMETHANE	ND (100)	ug/L

 See last page for explanation of symbols

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project A3693
Report Date 02-05-86

Client I.D.: P-2
ERG Sample No.: 12/141899
Matrix: NATURAL WATER

Parameter	Result	Units
VINYL CHLORIDE	ND (100)	ug/L
ZINC	0.71	mg/L

Client I.D.: P-3
ERG Sample No.: 12/141900
Matrix: NATURAL WATER

Parameter	Result	Units
ORGANIC CARBON, TOTAL	<1	mg/L
CUSTOM INORGANIC ANALYSIS	67	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
OIL AND GREASE	<1	mg/L

Client I.D.: P-4
ERG Sample No.: 12/141901
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	<0.12	mg/L
ARSENIC, TOTAL	<0.001	mg/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	<0.01	mg/L
ORGANIC CARBON, TOTAL	6	mg/L
CHROMIUM, TOTAL	0.14	mg/L
COPPER	0.07	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
AVERAGE OF DUPLICATE RUNS		
CUSTOM INORGANIC ANALYSIS	33	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON AVERAGE OF DUPLICATE RUNS		
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	2	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.02	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (100)	ug/L
BROMODICHLOROMETHANE	ND (100)	ug/L
BROMOFORM	ND (100)	ug/L
BROMOMETHANE	ND (100)	ug/L
CARBON TETRACHLORIDE	ND (100)	ug/L
CHLOROBENZENE	ND (100)	ug/L
CHLOROETHANE	ND (100)	ug/L

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: P-4
ERG Sample No.: 12/141901
Matrix: NATURAL WATER

Parameter	Result	Units
CHLOROETHYLVINYLETHER, 2	ND (100)	ug/L
CHLOROFORM	ND (100)	ug/L
CHLOROMETHANE	ND (100)	ug/L
CIS-1, 3-DICHLOROPROPENE	ND (100)	ug/L
DIBROMOCHLOROMETHANE	ND (100)	ug/L
DICHLOROETHANE, 1, 1-	ND (100)	ug/L
DICHLOROETHANE, 1, 2-	ND (100)	ug/L
DICHLOROETHENE, 1, 1-	ND (100)	ug/L
DICHLOROPROPANE, 1, 2-	ND (100)	ug/L
ETHYLBENZENE	ND (100)	ug/L
METHYLENE CHLORIDE	450	ug/L
TETRACHLOROETHANE, 1, 1, 2, 2-	ND (100)	ug/L
TETRACHLOROETHENE	1400	ug/L
TOLUENE	ND (100)	ug/L
TRANS-1, 3-DICHLOROPROPENE	ND (100)	ug/L
TRANS-1, 2-DICHLOROETHYLENE	330	ug/L
TRICHLOROETHANE, 1, 1, 1-	ND (100)	ug/L
TRICHLOROETHANE, 1, 1, 2-	ND (100)	ug/L
TRICHLOROETHENE	720	ug/L
TRICHLOROFLUOROMETHANE	ND (100)	ug/L
VINYL CHLORIDE	ND (100)	ug/L
ZINC	<0.02	mg/L

Client I.D.: P-5
ERG Sample No.: 12/141902
Matrix: NATURAL WATER

Parameter	Result	Units
ORGANIC CARBON, TOTAL	4	mg/L
CUSTOM INORGANIC ANALYSIS	36	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
OIL AND GREASE	<1	mg/L

Client I.D.: P-6
ERG Sample No.: 12/141903
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	0.12	mg/L
ARSENIC, TOTAL	0.003	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
CHROMIUM, TOTAL	0.03	mg/L
COPPER	0.07	mg/L

 See last page for explanation of symbols

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: 43693
Report Date: 02-05-86

Client I.D.: P-6
ERG Sample No.: 12/141903
Matrix: NATURAL WATER

Parameter	Result	Units
GC SPECIAL SCAN	ND (0.05)	mg/L
CUSTOM INORGANIC ANALYSIS	5	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON.		
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.02	mg/L
THALLIUM	ND (0.05)	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA• METH 624)		
BENZENE	ND (100)	ug/L
BROMODICHLOROMETHANE	ND (100)	ug/L
BROMOFORM	ND (100)	ug/L
BROMOMETHANE	ND (100)	ug/L
CARBON TETRACHLORIDE	ND (100)	ug/L
CHLOROBENZENE	ND (100)	ug/L
CHLOROETHANE	ND (100)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (100)	ug/L
CHLOROFORM	ND (100)	ug/L
CHLOROMETHANE	ND (100)	ug/L
CIS-1, 3-DICHLOROPROPENE	ND (100)	ug/L
DIBROMOCHLOROMETHANE	ND (100)	ug/L
DICHLOROETHANE, 1, 1-	ND (100)	ug/L
DICHLOROETHANE, 1, 2-	ND (100)	ug/L
DICHLOROETHENE, 1, 1-	ND (100)	ug/L
DICHLOROPROPANE, 1, 2-	ND (100)	ug/L
ETHYLBENZENE	ND (100)	ug/L
METHYLENE CHLORIDE	320	ug/L
TETRACHLOROETHANE, 1, 1, 2, 2-	ND (100)	ug/L
TETRACHLOROETHENE	210	ug/L
TOLUENE	ND (100)	ug/L
TRANS-1, 3-DICHLOROPROPENE	ND (100)	ug/L
TRANS-1, 2-DICHLOROETHYLENE	520	ug/L
TRICHLOROETHANE, 1, 1, 1-	ND (100)	ug/L
TRICHLOROETHANE, 1, 1, 2-	ND (100)	ug/L
TRICHLOROETHENE	95	ug/L
TRICHLOROFLUOROMETHANE	ND (100)	ug/L
VINYL CHLORIDE	ND (100)	ug/L
ZINC	<0.02	mg/L

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: P-7
ERG Sample No.: 12/141904
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	<0.12	mg/L
ARSENIC, TOTAL	0.006	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L
ORGANIC CARBON, TOTAL	3	mg/L
CHROMIUM, TOTAL	0.03	mg/L
COPPER	0.14	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
CUSTOM INORGANIC ANALYSIS	8	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
LEAD, TOTAL	ND (0.05)	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	4	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.02	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (10)	ug/L
BROMODICHLOROMETHANE	ND (10)	ug/L
BROMOFORM	ND (10)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (10)	ug/L
CHLOROBENZENE	43	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	ND (10)	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1, 3-DICHLOROPROPENE	ND (10)	ug/L
DIBROMOCHLOROMETHANE	ND (10)	ug/L
DICHLOROETHANE, 1, 1-	35	ug/L
DICHLOROETHANE, 1, 2-	ND (10)	ug/L
DICHLOROETHENE, 1, 1-	ND (10)	ug/L
DICHLOROPROPANE, 1, 2-	ND (10)	ug/L
ETHYLBENZENE	ND (10)	ug/L
METHYLENE CHLORIDE	ND (10)	ug/L
TETRACHLOROETHANE, 1, 1, 2, 2-	ND (10)	ug/L
TETRACHLOROETHENE	19	ug/L
TOLUENE	ND (10)	ug/L
TRANS-1, 3-DICHLOROPROPENE	ND (10)	ug/L
TRANS-1, 2-DICHLOROETHYLENE	120	ug/L
TRICHLOROETHANE, 1, 1, 1-	ND (10)	ug/L
TRICHLOROETHANE, 1, 1, 2-	ND (10)	ug/L
TRICHLOROETHENE	13	ug/L
TRICHLOROFLUOROMETHANE	ND (10)	ug/L
VINYL CHLORIDE	42	ug/L

 See last page for explanation of symbols

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: P-7
ERG Sample No.: 12/141904
Matrix: NATURAL WATER

Parameter	Result	Units
ZINC	<0.02	mg/L

Client I.D.: P-8
ERG Sample No.: 12/141905
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	<0.12	mg/L
ARSENIC, TOTAL	0.025	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
CHROMIUM, TOTAL	0.06	mg/L
COPPER	0.11	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
CUSTOM INORGANIC ANALYSIS	47	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	2	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.02	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (100)	ug/L
BROMODICHLOROMETHANE	ND (100)	ug/L
BROMOFORM	ND (100)	ug/L
BROMOMETHANE	ND (100)	ug/L
CARBON TETRACHLORIDE	ND (100)	ug/L
CHLOROBENZENE	ND (100)	ug/L
CHLOROETHANE	ND (100)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (100)	ug/L
CHLOROFORM	ND (100)	ug/L
CHLOROMETHANE	ND (100)	ug/L
CIS-1, 3-DICHLOROPROPENE	ND (100)	ug/L
DIBROMOCHLOROMETHANE	ND (100)	ug/L
DICHLOROETHANE, 1, 1-	310	ug/L
DICHLOROETHANE, 1, 2-	ND (100)	ug/L
DICHLOROETHENE, 1, 1-	ND (100)	ug/L
DICHLOROPROPANE, 1, 2-	ND (100)	ug/L
ETHYLBENZENE	ND (100)	ug/L
METHYLENE CHLORIDE	260	ug/L
TETRACHLOROETHANE, 1, 1, 2, 2-	ND (100)	ug/L
TETRACHLOROETHENE	ND (100)	ug/L

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date 02-05-86

Client I.D.: P-8
ERG Sample No.: 12/141905
Matrix: NATURAL WATER

Parameter	Result	Units
TOLUENE	ND (100)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (100)	ug/L
TRANS-1,2-DICHLOROETHYLENE	960	ug/L
TRICHLOROETHANE, 1,1,1-	ND (100)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (100)	ug/L
TRICHLOROETHENE	270	ug/L
TRICHLOROFLUOROMETHANE	ND (100)	ug/L
VINYL CHLORIDE	ND (100)	ug/L
ZINC	0.05	mg/L

Client I.D.: P-9
ERG Sample No.: 12/141906
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	0.036	mg/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	<0.01	mg/L
ORGANIC CARBON, TOTAL	<1	mg/L
CHROMIUM, TOTAL	<0.02	mg/L
COPPER	0.07	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
CUSTOM INORGANIC ANALYSIS	85	mg/L

Comments: THIS IS FOR TOTAL INORGANIC CARBON.

LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	2	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.02	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (100)	ug/L
BROMODICHLOROMETHANE	ND (100)	ug/L
BROMOFORM	ND (100)	ug/L
BROMOMETHANE	ND (100)	ug/L
CARBON TETRACHLORIDE	ND (100)	ug/L
CHLOROBENZENE	ND (100)	ug/L
CHLOROETHANE	ND (100)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (100)	ug/L
CHLOROFORM	ND (100)	ug/L
CHLOROMETHANE	ND (100)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (100)	ug/L
DIBROMOCHLOROMETHANE	ND (100)	ug/L
DICHLOROETHANE, 1,1-	ND (100)	ug/L

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Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: P-9
ERG Sample No.: 12/141906
Matrix: NATURAL WATER

Parameter	Result	Units
DICHLOROETHANE, 1,2-	ND (100)	ug/L
DICHLOROETHENE, 1,1-	ND (100)	ug/L
DICHLOROPROPANE, 1,2-	ND (100)	ug/L
ETHYLBENZENE	ND (100)	ug/L
METHYLENE CHLORIDE	310	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (100)	ug/L
TETRACHLOROETHENE	3200	ug/L
TOLUENE	ND (100)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (100)	ug/L
TRANS-1,2-DICHLOROETHYLENE	2700	ug/L
TRICHLOROETHANE, 1,1,1-	ND (100)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (100)	ug/L
TRICHLOROETHENE	3100	ug/L
TRICHLOROFLUOROMETHANE	ND (100)	ug/L
VINYL CHLORIDE	230	ug/L
ZINC	<0.02	mg/L

Client I.D.: I-1
ERG Sample No.: 12/141907
Matrix: NATURAL WATER

Parameter	Result	Units
ORGANIC CARBON, TOTAL	4	mg/L
CUSTOM INORGANIC ANALYSIS	52	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
OIL AND GREASE	1	mg/L

Client I.D.: I-2
ERG Sample No.: 12/141908
Matrix: NATURAL WATER

Parameter	Result	Units
ORGANIC CARBON, TOTAL	3	mg/L
CUSTOM INORGANIC ANALYSIS	1	mg/L
Comments: THIS IN FOR TOTAL INORGANIC CARBON.		
OIL AND GREASE	4	mg/L

Client I.D.: I-3
ERG Sample No.: 12/141909
Matrix: NATURAL WATER

Parameter	Result	Units
ORGANIC CARBON, TOTAL	5	mg/L
CUSTOM INORGANIC ANALYSIS	ND (1)	mg/L

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: I-3
ERG Sample No.: 12/141909
Matrix: NATURAL WATER

Parameter	Result	Units
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
OIL AND GREASE	<1	mg/L

Client I.D.: I-4
ERG Sample No.: 12/141910
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	0.13	mg/L
ARSENIC, TOTAL	0.005	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L
ORGANIC CARBON, TOTAL	3	mg/L
AVERAGE OF DUPLICATE RUNS		
CHROMIUM, TOTAL	0.09	mg/L
COPPER	0.07	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
CUSTOM INORGANIC ANALYSIS	23	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
AVERAGE OF DUPLICATE RUNS		
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	<0.001	mg/L
SILVER	<0.02	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (10)	ug/L
BROMODICHLOROMETHANE	ND (10)	ug/L
BROMOFORM	ND (10)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (10)	ug/L
CHLOROBENZENE	ND (10)	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	ND (10)	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (10)	ug/L
DIBROMOCHLOROMETHANE	ND (10)	ug/L
DICHLOROETHANE, 1,1-	ND (10)	ug/L
DICHLOROETHANE, 1,2-	ND (10)	ug/L
DICHLOROETHENE, 1,1-	ND (10)	ug/L
DICHLOROPROPANE, 1,2-	ND (10)	ug/L
ETHYLBENZENE	ND (10)	ug/L

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: I-4
ERG Sample No.: 12/141910
Matrix: NATURAL WATER

Parameter	Result	Units
METHYLENE CHLORIDE	59	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (10)	ug/L
TETRACHLOROETHENE	210	ug/L
TOLUENE	ND (10)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (10)	ug/L
TRANS-1,2-DICHLOROETHYLENE	400	ug/L
TRICHLOROETHANE, 1,1,1-	ND (10)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (10)	ug/L
TRICHLOROETHENE	210	ug/L
TRICHLOROFLUOROMETHANE	ND (10)	ug/L
VINYL CHLORIDE	ND (10)	ug/L
ZINC	0.05	mg/L

Client I.D.: M-1
ERG Sample No.: 12/141911
Matrix: NATURAL WATER

Parameter	Result	Units
ORGANIC CARBON, TOTAL	<1	mg/L
CUSTOM INORGANIC ANALYSIS	28	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
OIL AND GREASE	2	mg/L

Client I.D.: M-2
ERG Sample No.: 12/141912
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	<0.12	mg/L
ARSENIC, TOTAL	0.006	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	0.01	mg/L
ORGANIC CARBON, TOTAL	8	mg/L
CHROMIUM, TOTAL	1.8	mg/L
COPPER	0.03	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
CUSTOM INORGANIC ANALYSIS	95	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON.		
LEAD, TOTAL	0.08	mg/L
MERCURY	ND (0.0007)	mg/L
HIGHER DETECTION LIMIT DUE TO LOW SAMPLE VOLUME.		
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.02	mg/L

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: M-2
ERG Sample No.: 12/141912
Matrix: NATURAL WATER

Parameter	Result	Units
THALLIUM	ND (0.05)	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (1000)	ug/L
BROMODICHLOROMETHANE	ND (1000)	ug/L
BROMOFORM	ND (1000)	ug/L
BROMOMETHANE	ND (1000)	ug/L
CARBON TETRACHLORIDE	ND (1000)	ug/L
CHLOROBENZENE	ND (1000)	ug/L
CHLOROETHANE	ND (1000)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (1000)	ug/L
CHLOROFORM	ND (1000)	ug/L
CHLOROMETHANE	ND (1000)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (1000)	ug/L
DIBROMOCHLOROMETHANE	ND (1000)	ug/L
DICHLOROETHANE, 1,1-	ND (1000)	ug/L
DICHLOROETHANE, 1,2-	ND (1000)	ug/L
DICHLOROETHENE, 1,1-	ND (1000)	ug/L
DICHLOROPROPANE, 1,2-	ND (1000)	ug/L
ETHYLBENZENE	ND (1000)	ug/L
METHYLENE CHLORIDE	ND (1000)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (1000)	ug/L
TETRACHLOROETHENE	ND (1000)	ug/L
TOLUENE	7600	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (1000)	ug/L
TRANS-1,2-DICHLOROETHYLENE	ND (1000)	ug/L
TRICHLOROETHANE, 1,1,1-	ND (1000)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (1000)	ug/L
TRICHLOROETHENE	5900	ug/L
TRICHLOROFLUOROMETHANE	ND (1000)	ug/L
VINYL CHLORIDE	ND (1000)	ug/L
ZINC	0.34	mg/L

Client I.D.: CC
ERG Sample No.: 12/141913
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	0.008	mg/L
BERYLLIUM, TOTAL	0.005	mg/L
CADMIUM, TOTAL	0.01	mg/L
ORGANIC CARBON, TOTAL	22	mg/L
CHROMIUM, TOTAL	3.3	mg/L
COPPER	0.11	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
CUSTOM INORGANIC ANALYSIS	210	mg/L

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: CC
ERG Sample No.: 12/141913
Matrix: NATURAL WATER

Parameter	Result	Units
Comments: THIS IS FOR TOTAL INORGANIC CARBON.		
LEAD, TOTAL	0.12	mg/L
MERCURY	ND (0.0007)	mg/L
HIGHER DETECTION LIMIT DUE TO LOW SAMPLE VOLUME.		
NICKEL, TOTAL	0.14	mg/L
OIL AND GREASE	4	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	0.03	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (1)	ug/L
BROMODICHLOROMETHANE	ND (1)	ug/L
BROMOFORM	ND (1)	ug/L
BROMOMETHANE	ND (1)	ug/L
CARBON TETRACHLORIDE	ND (1)	ug/L
CHLOROBENZENE	ND (1)	ug/L
CHLOROETHANE	ND (1)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (1)	ug/L
CHLOROFORM	ND (1)	ug/L
CHLOROMETHANE	ND (1)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (1)	ug/L
DIBROMOCHLOROMETHANE	ND (1)	ug/L
DICHLOROETHANE, 1,1-	ND (1)	ug/L
DICHLOROETHANE, 1,2-	ND (1)	ug/L
DICHLOROETHENE, 1,1-	ND (1)	ug/L
DICHLOROPROPANE, 1,2-	ND (1)	ug/L
ETHYLBENZENE	ND (1)	ug/L
METHYLENE CHLORIDE	ND (1)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (1)	ug/L
TETRACHLOROETHENE	110	ug/L
TOLUENE	ND (1)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (1)	ug/L
TRANS-1,2-DICHLOROETHYLENE	9	ug/L
TRICHLOROETHANE, 1,1,1-	ND (1)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (1)	ug/L
TRICHLOROETHENE	99	ug/L
TRICHLOROFLUOROMETHANE	ND (1)	ug/L
VINYL CHLORIDE	ND (1)	ug/L
ZINC	0.43	mg/L

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: P-9 (REPLICATE)
ERG Sample No.: 12/141914
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	<0.12	mg/L
ARSENIC, TOTAL	0.034	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	0.01	mg/L
ORGANIC CARBON, TOTAL	5	mg/L
CHROMIUM, TOTAL	0.03	mg/L
COPPER	0.06	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
CUSTOM INORGANIC ANALYSIS	49	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
AVERAGE OF DUPLICATE RUNS		
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.02	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (100)	ug/L
BROMODICHLOROMETHANE	ND (100)	ug/L
BROMOFORM	ND (100)	ug/L
BROMOMETHANE	ND (100)	ug/L
CARBON TETRACHLORIDE	ND (100)	ug/L
CHLOROBENZENE	ND (100)	ug/L
CHLOROETHANE	ND (100)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (100)	ug/L
CHLOROFORM	ND (100)	ug/L
CHLOROMETHANE	ND (100)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (100)	ug/L
DIBROMOCHLOROMETHANE	ND (100)	ug/L
DICHLOROETHANE, 1,1-	ND (100)	ug/L
DICHLOROETHANE, 1,2-	ND (100)	ug/L
DICHLOROETHENE, 1,1-	ND (100)	ug/L
DICHLOROPROPANE, 1,2-	ND (100)	ug/L
ETHYLBENZENE	ND (100)	ug/L
METHYLENE CHLORIDE	340	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (100)	ug/L
TETRACHLOROETHENE	3400	ug/L
TOLUENE	ND (100)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (100)	ug/L
TRANS-1,2-DICHLOROETHYLENE	2800	ug/L
TRICHLOROETHANE, 1,1,1-	ND (100)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (100)	ug/L
TRICHLOROETHENE	3500	ug/L

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

Client I.D.: P-9 (REPLICATE)
ERG Sample No.: 12/141914
Matrix: NATURAL WATER

Parameter	Result	Units
TRICHLORCFLUOROMETHANE	ND (100)	ug/L
VINYL CHLORIDE	330	ug/L
ZINC	<0.02	mg/L

Client I.D.: BAILER WASH
ERG Sample No.: 12/141915
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	ND (0.001)	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	0.01	mg/L
ORGANIC CARBON, TOTAL	2	mg/L
CHROMIUM, TOTAL	<0.02	mg/L
COPPER	0.02	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
CUSTOM INORGANIC ANALYSIS	ND (1)	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	2	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	ND (0.02)	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (1)	ug/L
BROMODICHLOROMETHANE	ND (1)	ug/L
BROMOFORM	ND (1)	ug/L
BROMOMETHANE	ND (1)	ug/L
CARBON TETRACHLORIDE	ND (1)	ug/L
CHLOROBENZENE	ND (1)	ug/L
CHLOROETHANE	ND (1)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (1)	ug/L
CHLOROFORM	ND (1)	ug/L
CHLOROMETHANE	ND (1)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (1)	ug/L
DIBROMOCHLOROMETHANE	ND (1)	ug/L
DICHLOROETHANE, 1,1-	ND (1)	ug/L
DICHLOROETHANE, 1,2-	ND (1)	ug/L
DICHLOROETHENE, 1,1-	ND (1)	ug/L
DICHLOROPROPANE, 1,2-	ND (1)	ug/L
ETHYLBENZENE	ND (1)	ug/L
METHYLENE CHLORIDE	ND (1)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (1)	ug/L

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date 02-05-86

Client I.D.: BAILER WASH
ERG Sample No.: 12/141915
Matrix: NATURAL WATER

Parameter	Result	Units
TETRACHLOROETHENE	ND (1)	ug/L
TOLUENE	ND (1)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (1)	ug/L
TRANS-1,2-DICHLOROETHYLENE	ND (1)	ug/L
TRICHLOROETHANE, 1,1,1-	ND (1)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (1)	ug/L
TRICHLOROETHENE	ND (1)	ug/L
TRICHLOROFLUOROMETHANE	ND (1)	ug/L
VINYL CHLORIDE	ND (1)	ug/L
ZINC	<0.02	mg/L

Client I.D.: FIELD BLANK
ERG Sample No.: 12/141916
Matrix: NATURAL WATER

Parameter	Result	Units
ANTIMONY	<0.12	mg/L
ARSENIC, TOTAL	ND (0.001)	mg/L
AVERAGE OF DUPLICATE RUNS		
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	0.01	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
CHROMIUM, TOTAL	<0.01	mg/L
COPPER	0.07	mg/L
GC SPECIAL SCAN	ND (0.05)	mg/L
CUSTOM INORGANIC ANALYSIS	ND (1)	mg/L
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	1	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
AVERAGE OF DUPLICATE RUNS		
SILVER	ND (0.02)	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (1)	ug/L
BROMODICHLOROMETHANE	ND (1)	ug/L
BROMOFORM	ND (1)	ug/L
BROMOMETHANE	ND (1)	ug/L
CARBON TETRACHLORIDE	ND (1)	ug/L
CHLOROBENZENE	ND (1)	ug/L
CHLOROETHANE	ND (1)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (1)	ug/L

 See last page for explanation of symbols.

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date: 02-05-86

Client I.D.: FIELD BLANK
ERG Sample No.: 12/141916
Matrix: NATURAL WATER

Parameter	Result	Units
CHLOROFORM	ND (1)	ug/L
CHLOROMETHANE	ND (1)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (1)	ug/L
DIBROMOCHLOROMETHANE	ND (1)	ug/L
DICHLOROETHANE, 1,1-	ND (1)	ug/L
DICHLOROETHANE, 1,2-	ND (1)	ug/L
DICHLOROETHENE, 1,1-	ND (1)	ug/L
DICHLOROPROPANE, 1,2-	ND (1)	ug/L
ETHYLBENZENE	ND (1)	ug/L
METHYLENE CHLORIDE	ND (1)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (1)	ug/L
TETRACHLOROETHENE	ND (1)	ug/L
TOLUENE	ND (1)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (1)	ug/L
TRANS-1,2-DICHLOROETHYLENE	ND (1)	ug/L
TRICHLOROETHANE, 1,1,1-	ND (1)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (1)	ug/L
TRICHLOROETHENE	ND (1)	ug/L
TRICHLOROFLUOROMETHANE	ND (1)	ug/L
VINYL CHLORIDE	ND (1)	ug/L
ZINC	<0.02	mg/L

Project Notes: SAMPLES WILL BE HELD 30 DAYS UNLESS OTHERWISE NOTIFIED.

SD-Sample damaged
FR-See field report for result
SR-See attached report
NA-Result not applicable to test

ND-Nondetected, Detection limit in ()
<-Positive result at an unquantifiable concentration below indicated level

Thank you for your business. Page 24 Last Page

Table A-4. Results of 12/5/85 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

117 N. FIRST
ANN ARBOR, MICHIGAN 48104 (313) 662-3104

Project: A385/
Report Date: 02-17-86

Client P.O. CONTRACT
Report: 16838

Samples Recvd: 01-17-86
Refer Questions To:
ROBYN WOOLEY

Client:
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
8400 WESTPARK DRIVE
MC LEAN, VA 22102

Approved: Barbara Lawson

***
Residual Samples Will Be Held
TWO WEEKS
***

Client I.D.: FB-1
ERG Sample No.: 01/144234
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	<1	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
OIL AND GREASE	ND (1)	mg/L

Client I.D.: M-1
ERG Sample No.: 01/144235
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	62	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
OIL AND GREASE	2	mg/L

Client I.D.: M-2
ERG Sample No.: 01/144236
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	60	mg/L
ORGANIC CARBON, TOTAL	5	mg/L
OIL AND GREASE	<1	mg/L

Client I.D.: CC
ERG Sample No.: 01/144237
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	85	mg/L
ORGANIC CARBON, TOTAL	5	mg/L
OIL AND GREASE	1	mg/L

 See last page for explanation of symbols.

Table A-5. Results of 1/16/86 Groundwater Sampling

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3857
Report Date: 02-17-86

Client I.D.: I-1
ERG Sample No.: 01/144238
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	63	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
OIL AND GREASE	<1	mg/L

Client I.D.: I-2
ERG Sample No.: 01/144239
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	60	mg/L
ORGANIC CARBON, TOTAL	<1	mg/L
OIL AND GREASE	<1	mg/L

Client I.D.: I-3
ERG Sample No.: 01/144240
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	60	mg/L
AVERAGE OF DUPLICATE RUNS ORGANIC CARBON, TOTAL	2	mg/L
AVERAGE OF DUPLICATE RUNS OIL AND GREASE	<1	mg/L

Client I.D.: I-4
ERG Sample No.: 01/144241
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	59	mg/L
ORGANIC CARBON, TOTAL	<1	mg/L
OIL AND GREASE	<1	mg/L

Client I.D.: P-1
ERG Sample No.: 01/144242
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	73	mg/L
ORGANIC CARBON, TOTAL	6	mg/L
OIL AND GREASE	<1	mg/L

 See last page for explanation of symbols.

Table A-5. Results of 1/16/86 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3857
Report Date: 02-17-86

Client I.D.: P-2
ERG Sample No.: 01/144243
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	64	mg/L
ORGANIC CARBON, TOTAL	5	mg/L
OIL AND GREASE	2	mg/L

Client I.D.: P-3
ERG Sample No.: 01/144244
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	77	mg/L
ORGANIC CARBON, TOTAL	2	mg/L
OIL AND GREASE	2	mg/L

Client I.D.: P-4
ERG Sample No.: 01/144245
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	68	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
OIL AND GREASE	<1	mg/L

Client I.D.: P-5
ERG Sample No.: 01/144246
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	65	mg/L
ORGANIC CARBON, TOTAL	2	mg/L
OIL AND GREASE	2	mg/L

Client I.D.: P-6
ERG Sample No.: 01/144247
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	72	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
OIL AND GREASE	1	mg/L

 See last page for explanation of symbols.

Table A-5. Results of 1/16/86 Groundwater Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3857
Report Date: 02-17-86

Client I.D.: P-7
ERG Sample No.: 01/144248
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	73	mg/L
ORGANIC CARBON, TOTAL AVERAGE OF DUPLICATE RUNS	6	mg/L
OIL AND GREASE AVERAGE OF DUPLICATE RUNS	<1	mg/L

Client I.D.: P-8
ERG Sample No.: 01/144249
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	59	mg/L
ORGANIC CARBON, TOTAL	7	mg/L
OIL AND GREASE	2	mg/L

Client I.D.: P-9
ERG Sample No.: 01/144250
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	94	mg/L
ORGANIC CARBON, TOTAL	6	mg/L
OIL AND GREASE	<1	mg/L

Client I.D.: P-8R
ERG Sample No.: 01/144251
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	67	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
OIL AND GREASE	1	mg/L

Client I.D.: BW-1
ERG Sample No.: 01/144252
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	ND (1)	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
OIL AND GREASE	ND (1)	mg/L

 See last page for explanation of symbols.

Table A-5. Results of 1/16/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc.

Analytical Report

Project: A3989
Report Date: 07-29-86

117 N. FIRST
ANN ARBOR, MICHIGAN 48104 (313) 662-3104

Client P.O. 46-860015-76
Report: 20437

Samples Recvd: 02-18-86
Refer Questions To:
ROBYN WOOLEY

Client:
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
8400 WESTPARK DRIVE
MC LEAN, VA 22102

Approved: [signature]

Residual Samples Will Be Held
TWO WEEKS

Client I.D.: P1
ERG Sample No.: 02/146342
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
AVERAGE OF DUPLICATE RUNS		
ARSENIC, TOTAL	ND (0.001)	mg/L
AVERAGE OF DUPLICATE RUNS		
BERYLLIUM, TOTAL	ND (0.005)	mg/L
AVERAGE OF DUPLICATE RUNS		
CADMIUM, TOTAL	<0.01	mg/L
AVERAGE OF DUPLICATE RUNS		
INORGANIC CARBON, TOTAL	100	mg/L
ORGANIC CARBON, TOTAL	6	mg/L
CHROMIUM, TOTAL	ND (0.02)	mg/L
AVERAGE OF DUPLICATE RUNS		
COPPER	0.24	mg/L
AVERAGE OF DUPLICATE RUNS		
QC SPECIAL SCAN	ND (0.050)	mg/L
Comments: QC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.		
LEAD, TOTAL	<0.02	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	ND (0.05)	mg/L
AVERAGE OF DUPLICATE RUNS		
OIL AND GREASE	2	mg/L
SELENIUM, TOTAL	ND (0.002)	mg/L
HIGHER DETECTION LIMIT DUE TO MATRIX INTERFERENCE. AVERAGE OF DUPLICATE RUNS		
SILVER	0.01	mg/L
AVERAGE OF DUPLICATE RUNS		
THALLIUM	<0.05	mg/L
AVERAGE OF DUPLICATE RUNS		

 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling

TMA ERG
Thermo Analytical Inc. **Analytical Report**

Project: A3989
Report Date: 07-29-86

Client I.D.: P1
ERG Sample No.: 02/146342
Matrix: GROUND WATER

Parameter	Result	Units
VOLATILE FRACTION (PRIOR. POLL S. EPA METH 624)		
BENZENE	ND (5)	ug/L
BROMODICHLOROMETHANE	ND (5)	ug/L
BROMOFORM	ND (5)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (5)	ug/L
CHLOROBENZENE	26	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	ND (5)	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (5)	ug/L
DIBROMOCHLOROMETHANE	ND (5)	ug/L
DICHLOROETHANE, 1,1-	19	ug/L
DICHLOROETHANE, 1,2-	ND (5)	ug/L
DICHLOROETHENE, 1,1-	ND (5)	ug/L
DICHLOROPROPANE, 1,2-	ND (5)	ug/L
ETHYLBENZENE	ND (5)	ug/L
METHYLENE CHLORIDE	ND (15)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (5)	ug/L
TETRACHLOROETHENE	9	ug/L
TOLUENE	ND (5)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (5)	ug/L
TRANS-1,2-DICHLOROETHYLENE	340	ug/L
TRICHLOROETHANE, 1,1,1-	ND (5)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (5)	ug/L
TRICHLOROETHENE	13	ug/L
TRICHLOROFLUOROMETHANE	ND (5)	ug/L
VINYL CHLORIDE	330	ug/L
ZINC	0.64	mg/L

AVERAGE OF DUPLICATE RUNS

Client I.D.: P2
ERG Sample No.: 02/146343
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	<0.001	mg/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	<0.01	mg/L
INORGANIC CARBON, TOTAL	77	mg/L
ORGANIC CARBON, TOTAL	9	mg/L
CHROMIUM, TOTAL	<0.02	mg/L
COPPER	0.46	mg/L
LEAD, TOTAL	<0.05	mg/L

Page 2 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc. **Analytical Report**

Project: A3989
Report Date: 07-29-86

Client I.D.: P2
ERG Sample No.: 02/146343
Matrix: GROUND WATER

Parameter	Result	Units
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	0.08	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	ND (0.002)	mg/L
HIGHER DETECTION LIMIT DUE TO MATRIX INTERFERENCE.		
SILVER	0.01	mg/L
THALLIUM	ND (0.05)	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (10)	ug/L
BROMODICHLOROMETHANE	ND (10)	ug/L
BROMOFORM	ND (10)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (10)	ug/L
CHLOROBENZENE	21	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	ND (10)	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (10)	ug/L
DIBROMOCHLOROMETHANE	ND (10)	ug/L
DICHLOROETHANE, 1,1-	27	ug/L
DICHLOROETHANE, 1,2-	ND (10)	ug/L
DICHLOROETHENE, 1,1-	18	ug/L
DICHLOROPROPANE, 1,2-	ND (10)	ug/L
ETHYLBENZENE	ND (10)	ug/L
METHYLENE CHLORIDE	290	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (10)	ug/L
TETRACHLOROETHENE	240	ug/L
TOLUENE	ND (10)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (10)	ug/L
TRANS-1,2-DICHLOROETHYLENE	1700	ug/L
TRICHLOROETHANE, 1,1,1-	ND (10)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (10)	ug/L
TRICHLOROETHENE	690	ug/L
TRICHLOROFLUOROMETHANE	ND (10)	ug/L
VINYL CHLORIDE	30	ug/L
ZINC	0.78	mg/L

Client I.D.: P3
ERG Sample No.: 02/146344
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	99	mg/L
ORGANIC CARBON, TOTAL	5	mg/L
OIL AND GREASE	ND (1)	mg/L

 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc. **Analytical Report**

Project: A3987
Report Date: 07-29-86

Client I.D.: P4
ERG Sample No: 02/146345
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	ND (0.001)	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L
INORGANIC CARBON, TOTAL	69	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
CHROMIUM, TOTAL	0.17	mg/L
COPPER	0.04	mg/L
OC SPECIAL SCAN	0.36	mg/L
Comments: OC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.		
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	<0.001	mg/L
SILVER	<0.01	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (10)	ug/L
BROMODICHLOROMETHANE	ND (10)	ug/L
BROMOFORM	ND (10)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (10)	ug/L
CHLOROBENZENE	ND (10)	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	ND (10)	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (10)	ug/L
DIBROMOCHLOROMETHANE	ND (10)	ug/L
DICHLOROETHANE, 1,1-	ND (10)	ug/L
DICHLOROETHANE, 1,2-	ND (10)	ug/L
DICHLOROETHENE, 1,1-	ND (10)	ug/L
DICHLOROPROPANE, 1,2-	ND (10)	ug/L
ETHYLBENZENE	ND (10)	ug/L
METHYLENE CHLORIDE	160	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (10)	ug/L
TETRACHLOROETHENE	1200	ug/L
TOLUENE	ND (10)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (10)	ug/L
TRANS-1,2-DICHLOROETHYLENE	1100	ug/L
TRICHLOROETHANE, 1,1,1-	ND (10)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (10)	ug/L
TRICHLOROETHENE	870	ug/L
TRICHLOROFLUOROMETHANE	ND (10)	ug/L
VINYL CHLORIDE	25	ug/L

Page 4 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

Client I.D.: P4
ERG Sample No.: 02/146345
Matrix: GROUND WATER

Parameter	Result	Units
ZINC	<0.02	mg/L

Client I.D.: P5
ERG Sample No.: 02/146346
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	76	mg/L
ORGANIC CARBON, TOTAL	4	mg/L
QC SPECIAL SCAN	0.31	mg/L
Comments: QC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.		
OIL AND GREASE	ND (1)	mg/L

Client I.D.: P6
ERG Sample No.: 02/146347
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	0.004	mg/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	<0.01	mg/L
INORGANIC CARBON, TOTAL	70	mg/L
ORGANIC CARBON, TOTAL	1	mg/L
CHROMIUM, TOTAL	<0.02	mg/L
COPPER	0.03	mg/L
QC SPECIAL SCAN	0.076	mg/L
Comments: QC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.		
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	1	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.01	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (5)	ug/L
BROMODICHLOROMETHANE	ND (5)	ug/L
BROMOFORM	ND (5)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (5)	ug/L
CHLOROBENZENE	12	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc. **Analytical Report**

Project: A3989
Report Date: 07-29-86

Client I.D.: P6
ERG Sample No: 02/146347
Matrix: GROUND WATER

Parameter	Result	Units
CHLOROFORM	ND (5)	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (5)	ug/L
DIBROMOCHLOROMETHANE	ND (5)	ug/L
DICHLOROETHANE, 1,1-	ND (5)	ug/L
DICHLOROETHANE, 1,2-	ND (5)	ug/L
DICHLOROETHENE, 1,1-	ND (5)	ug/L
DICHLOROPROPANE, 1,2-	ND (5)	ug/L
ETHYLBENZENE	31	ug/L
METHYLENE CHLORIDE	ND (5)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	240	ug/L
TETRACHLOROETHENE	ND (5)	ug/L
TOLUENE	ND (5)	ug/L
TRANS-1,3-DICHLOROPROPENE	570	ug/L
TRANS-1,2-DICHLOROETHYLENE	ND (5)	ug/L
TRICHLOROETHANE, 1,1,1-	ND (5)	ug/L
TRICHLOROETHANE, 1,1,2-	290	ug/L
TRICHLOROETHENE	ND (5)	ug/L
TRICHLOROFLUOROMETHANE	100	ug/L
VINYL CHLORIDE	ND (0.02)	mg/L
ZINC		

Client I.D.: P7
ERG Sample No.: 02/146348
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	ND (0.001)	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L
INORGANIC CARBON, TOTAL	70	mg/L
ORGANIC CARBON, TOTAL	4	mg/L
CHROMIUM, TOTAL	<0.02	mg/L
COPPER	0.09	mg/L
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	2	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.01	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (5)	ug/L
BROMODICHLOROMETHANE	ND (5)	ug/L
BROMOFORM	ND (5)	ug/L

 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

Client I.D.: P7
ERG Sample No.: 02/146348
Matrix: GROUND WATER

Parameter	Result	Units
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (5)	ug/L
CHLOROBENZENE	43	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	3	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (5)	ug/L
DIBROMOCHLOROMETHANE	ND (5)	ug/L
DICHLOROETHANE, 1,1-	120	ug/L
DICHLOROETHANE, 1,2-	ND (5)	ug/L
DICHLOROETHENE, 1,1-	7	ug/L
DICHLOROPROPANE, 1,2-	ND (5)	ug/L
ETHYLBENZENE	ND (5)	ug/L
METHYLENE CHLORIDE	ND (15)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (5)	ug/L
TETRACHLOROETHENE	<5	ug/L
TOLUENE	ND (5)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (5)	ug/L
TRANS-1,2-DICHLOROETHYLENE	190	ug/L
TRICHLOROETHANE, 1,1,1-	16	ug/L
TRICHLOROETHANE, 1,1,2-	ND (5)	ug/L
TRICHLOROETHENE	23	ug/L
TRICHLOROFLUOROMETHANE	ND (5)	ug/L
VINYL CHLORIDE	39	ug/L
ZINC	<0.02	mg/L

Client I.D.: P8
ERG Sample No.: 02/146349
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	0.015	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L
INORGANIC CARBON, TOTAL	86	mg/L
ORGANIC CARBON, TOTAL	4	mg/L
CHROMIUM, TOTAL	ND (0.02)	mg/L
COPPER	0.05	mg/L
OC SPECIAL SCAN	0.20	mg/L

Comments: OC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.

LEAD, TOTAL	ND (0.05)	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc.

Analytical Report

Project: A3959
Report Date: 07-29-86

Client I.D.: P8
ERG Sample No.: 02/146349
Matrix: GROUND WATER

Parameter	Result	Units
OIL AND GREASE	ND (1)	mg/L
SELENIUM, TOTAL	ND (0.002)	mg/L
HIGHER DETECTION LIMIT DUE TO MATRIX INTERFERENCE.		
SILVER	<0.01	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (25)	ug/L
BROMODICHLOROMETHANE	ND (25)	ug/L
BROMOFORM	ND (25)	ug/L
BROMOMETHANE	ND (25)	ug/L
CARBON TETRACHLORIDE	ND (25)	ug/L
CHLOROBENZENE	60	ug/L
CHLOROETHANE	ND (25)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (25)	ug/L
CHLOROFORM	ND (25)	ug/L
CHLOROMETHANE	ND (25)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (25)	ug/L
DIBROMOCHLOROMETHANE	ND (25)	ug/L
DICHLOROETHANE, 1,1-	690	ug/L
DICHLOROETHANE, 1,2-	ND (25)	ug/L
DICHLOROETHENE, 1,1-	130	ug/L
DICHLOROPROPANE, 1,2-	ND (25)	ug/L
ETHYLBENZENE	ND (25)	ug/L
METHYLENE CHLORIDE	300	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (25)	ug/L
TETRACHLOROETHENE	220	ug/L
TOLUENE	ND (25)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (25)	ug/L
TRANS-1,2-DICHLOROETHYLENE	2900	ug/L
TRICHLOROETHANE, 1,1,1-	320	ug/L
TRICHLOROETHANE, 1,1,2-	ND (25)	ug/L
TRICHLOROETHENE	560	ug/L
TRICHLOROFLUOROMETHANE	ND (25)	ug/L
VINYL CHLORIDE	400	ug/L
ZINC	0.03	mg/L

Client I.D.: P9
ERG Sample No: 02/146350
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	0.014	mg/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	<0.01	mg/L
INORGANIC CARBON, TOTAL	110	mg/L

 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc. **Analytical Report**

Project: A3989
Report Date: 07-29-86

Client I.D.: P9
ERG Sample No.: 02/146350
Matrix: GROUND WATER

Parameter	Result	Units
ORGANIC CARBON, TOTAL	6	mg/L
CHROMIUM, TOTAL	0.05	mg/L
COPPER	0.07	mg/L
GC SPECIAL SCAN	0.37	mg/L
Comments: GC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.		
LEAD, TOTAL	<0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	0.07	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	ND (0.002)	mg/L
HIGHER DETECTION LIMIT DUE TO MATRIX INTERFERENCE.		
SILVER	<0.01	mg/L
THALLIUM	ND (0.05)	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (10)	ug/L
BROMODICHLOROMETHANE	ND (10)	ug/L
BROMOFORM	ND (10)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (10)	ug/L
CHLOROBENZENE	49	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	20	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (10)	ug/L
DIBROMOCHLOROMETHANE	ND (10)	ug/L
DICHLOROETHANE, 1,1-	ND (10)	ug/L
DICHLOROETHANE, 1,2-	ND (10)	ug/L
DICHLOROETHENE, 1,1-	ND (10)	ug/L
DICHLOROPROPANE, 1,2-	ND (10)	ug/L
ETHYLBENZENE	ND (10)	ug/L
METHYLENE CHLORIDE	80	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (10)	ug/L
TETRACHLOROETHENE	1300	ug/L
TOLUENE	ND (10)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (10)	ug/L
TRANS-1,2-DICHLOROETHYLENE	1900	ug/L
TRICHLOROETHANE, 1,1,1-	ND (10)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (10)	ug/L
TRICHLOROETHENE	850	ug/L
TRICHLOROFLUOROMETHANE	ND (10)	ug/L
VINYL CHLORIDE	630	ug/L
ZINC	0.04	mg/L

Page 9 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

Client I.D.: P9R
ERG Sample No.: 02/146351
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	0.014	mg/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	<0.01	mg/L
INORGANIC CARBON, TOTAL	110	mg/L
AVERAGE OF DUPLICATE RUNS		
ORGANIC CARBON, TOTAL	7	mg/L
AVERAGE OF DUPLICATE RUNS		
CHROMIUM, TOTAL	0.03	mg/L
COPPER	0.07	mg/L
GC SPECIAL SCAN	0.37	mg/L
Comments: GC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.		
LEAD, TOTAL	<0.05	mg/L
MERCURY	<0.0002	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	ND (0.002)	mg/L
HIGHER DETECTION LIMIT DUE TO MATRIX INTERFERENCE.		
SILVER	<0.01	mg/L
THALLIUM	ND (0.05)	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (10)	ug/L
BROMODICHLOROMETHANE	ND (10)	ug/L
BROMOFORM	ND (10)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (10)	ug/L
CHLOROBENZENE	10	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	ND (10)	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (10)	ug/L
DIBROMOCHLOROMETHANE	ND (10)	ug/L
DICHLOROETHANE, 1,1-	ND (10)	ug/L
DICHLOROETHANE, 1,2-	ND (10)	ug/L
DICHLOROETHENE, 1,1-	ND (10)	ug/L
DICHLOROPROPANE, 1,2-	ND (10)	ug/L
ETHYLBENZENE	ND (10)	ug/L
METHYLENE CHLORIDE	76	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (10)	ug/L
TETRACHLOROETHENE	1200	ug/L
TOLUENE	ND (10)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (10)	ug/L
TRANS-1,2-DICHLOROETHYLENE	1900	ug/L

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

Client I.D.: P9R
ERG Sample No.: 02/146351
Matrix: GROUND WATER

Parameter	Result	Units
TRICHLOROETHANE, 1,1,1-	ND (10)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (10)	ug/L
TRICHLOROETHENE	810	ug/L
TRICHLOROFLUOROMETHANE	ND (10)	ug/L
VINYL CHLORIDE	390	ug/L
ZINC	0.04	mg/L

Client I.D.: I1
ERG Sample No: 02/146352
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	41	mg/L
ORGANIC CARBON, TOTAL	6	mg/L
OIL AND GREASE	ND (1)	mg/L

Client I.D.: I2
ERG Sample No: 02/146353
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	51	mg/L
ORGANIC CARBON, TOTAL	1	mg/L
OIL AND GREASE	<1	mg/L

Client I.D.: I3
ERG Sample No.: 02/146354
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	35	mg/L
ORGANIC CARBON, TOTAL	6	mg/L
GC SPECIAL SCAN	ND (0.050)	mg/L

Comments: GC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.

OIL AND GREASE	<1	mg/L

Client I.D.: I4
ERG Sample No.: 02/146355
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	0.004	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc.

Analytical Report

Project: A3989
Report Date: 07-29-86

Client I.D.: I4
ERG Sample No.: 02/146355
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	53	mg/L
ORGANIC CARBON, TOTAL	4	mg/L
CHROMIUM, TOTAL	0.11	mg/L
COPPER	<0.02	mg/L
GC SPECIAL SCAN	ND (0.050)	mg/L
Comments: GC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.		
LEAD, TOTAL	ND (0.05)	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	0.06	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.01	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (5)	ug/L
BROMODICHLOROMETHANE	ND (5)	ug/L
BROMOFORM	ND (5)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (5)	ug/L
CHLOROBENZENE	ND (5)	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	ND (5)	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (5)	ug/L
DIBROMOCHLOROMETHANE	ND (5)	ug/L
DICHLOROETHANE, 1,1-	9	ug/L
DICHLOROETHANE, 1,2-	ND (5)	ug/L
DICHLOROETHENE, 1,1-	ND (5)	ug/L
DICHLOROPROPANE, 1,2-	ND (5)	ug/L
ETHYLBENZENE	ND (5)	ug/L
METHYLENE CHLORIDE	ND (15)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (5)	ug/L
TETRACHLOROETHENE	23	ug/L
TOLUENE	ND (5)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (5)	ug/L
TRANS-1,2-DICHLOROETHYLENE	26	ug/L
TRICHLOROETHANE, 1,1,1-	<5	ug/L
TRICHLOROETHANE, 1,1,2-	ND (5)	ug/L
TRICHLOROETHENE	9	ug/L
TRICHLOROFLUOROMETHANE	ND (5)	ug/L
VINYL CHLORIDE	<10	ug/L
ZINC	0.07	mg/L

 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc. **Analytical Report** Project: A3989
Report Date: 07-29-86

Client I.D.: M1
ERG Sample No.: 02/146356
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	46	mg/L
ORGANIC CARBON, TOTAL	10	mg/L
OIL AND GREASE	1	mg/L

Client I.D.: M2
ERG Sample No.: 02/146357
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	ND (0.001)	mg/L
BERYLLIUM, TOTAL	ND (0.005)	mg/L
CADMIUM, TOTAL	<0.01	mg/L
INORGANIC CARBON, TOTAL	110	mg/L
ORGANIC CARBON, TOTAL	4	mg/L
CHROMIUM, TOTAL	0.49	mg/L
COPPER	0.02	mg/L
GC SPECIAL SCAN	ND (2.4)	mg/L
Comments: GC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.		
LEAD, TOTAL	0.05	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	0.06	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	<0.001	mg/L
SILVER	<0.01	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	<100	ug/L
BROMODICHLOROMETHANE	ND (100)	ug/L
BROMOFORM	ND (100)	ug/L
BROMOMETHANE	ND (100)	ug/L
CARBON TETRACHLORIDE	ND (100)	ug/L
CHLOROBENZENE	ND (100)	ug/L
CHLOROETHANE	ND (100)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (100)	ug/L
CHLOROFORM	190	ug/L
CHLOROMETHANE	ND (100)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (100)	ug/L
DIBROMOCHLOROMETHANE	ND (100)	ug/L
DICHLOROETHANE, 1,1-	ND (100)	ug/L
DICHLOROETHANE, 1,2-	ND (100)	ug/L
DICHLOROETHENE, 1,1-	ND (100)	ug/L
DICHLOROPROPANE, 1,2-	ND (100)	ug/L
ETHYLBENZENE	ND (100)	ug/L
METHYLENE CHLORIDE	27000	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (100)	ug/L

 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

Client I.D.: M2
ERG Sample No.: 02/146357
Matrix: GROUND WATER

Parameter	Result	Units
TETRACHLOROETHENE	10000	ug/L
TOLUENE	ND (100)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (100)	ug/L
TRANS-1,2-DICHLOROETHYLENE	2000	ug/L
TRICHLOROETHANE, 1,1,1-	ND (100)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (100)	ug/L
TRICHLOROETHENE	7100	ug/L
TRICHLOROFLUOROMETHANE	ND (100)	ug/L
VINYL CHLORIDE	140	ug/L
ZINC	0.18	mg/L

Client I.D.: CC
ERG Sample No.: 02/146358
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	0.001	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L
INORGANIC CARBON, TOTAL	150	mg/L
ORGANIC CARBON, TOTAL	6	mg/L
CHROMIUM, TOTAL	2.2	mg/L
COPPER	0.06	mg/L
GC SPECIAL SCAN	3.8	mg/L
Comments: GC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.		
LEAD, TOTAL	0.08	mg/L
MERCURY	ND (0.0002)	mg/L
AVERAGE OF DUPLICATE RUNS		
NICKEL, TOTAL	0.11	mg/L
OIL AND GREASE	<1	mg/L
SELENIUM, TOTAL	ND (0.002)	mg/L
HIGHER DETECTION LIMIT DUE TO MATRIX INTERFERENCE.		
SILVER	0.02	mg/L
THALLIUM	<0.05	mg/L
VOLATILE FRACTION (PRIOR. PCLLS. EPA METH 624)		
BENZENE	ND (100)	ug/L
BROMODICHLOROMETHANE	ND (100)	ug/L
BROMOFORM	ND (100)	ug/L
BROMOMETHANE	ND (100)	ug/L
CARBON TETRACHLORIDE	ND (100)	ug/L
CHLOROBENZENE	ND (100)	ug/L
CHLOROETHANE	ND (100)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (100)	ug/L

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc. **Analytical Report**

Project: A3989
Report Date: 07-29-86

Client I.D.: CC
ERG Sample No.: 02/146358
Matrix: GROUND WATER

Parameter	Result	Units
CHLOROFORM	ND (100)	ug/L
CHLOROMETHANE	ND (100)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (100)	ug/L
DIBROMOCHLOROMETHANE	ND (100)	ug/L
DICHLOROETHANE, 1,1-	ND (100)	ug/L
DICHLOROETHANE, 1,2-	ND (100)	ug/L
DICHLOROETHENE, 1,1-	ND (100)	ug/L
DICHLOROPROPANE, 1,2-	ND (100)	ug/L
ETHYLBENZENE	2800	ug/L
METHYLENE CHLORIDE	ND (100)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (100)	ug/L
TETRACHLOROETHENE	14000	ug/L
TOLUENE	ND (100)	ug/L
TRANS-1,3-DICHLOROPROPENE	2900	ug/L
TRANS-1,2-DICHLOROETHYLENE	ND (100)	ug/L
TRICHLOROETHANE, 1,1,1-	ND (100)	ug/L
TRICHLOROETHANE, 1,1,2-	9400	ug/L
TRICHLOROETHENE	ND (100)	ug/L
TRICHLOROFLUOROMETHANE	610	ug/L
VINYL CHLORIDE	0.29	mg/L
ZINC		

Client I.D.: FB1
ERG Sample No.: 02/146359
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
ARSENIC, TOTAL	ND (0.001)	mg/L
BERYLLIUM, TOTAL	<0.005	mg/L
CADMIUM, TOTAL	<0.01	mg/L
INORGANIC CARBON, TOTAL	ND (1)	mg/L
ORGANIC CARBON, TOTAL	ND (1)	mg/L
CHROMIUM, TOTAL	<0.02	mg/L
COPPER	<0.02	mg/L
GC SPECIAL SCAN	0.061	mg/L

Comments: GC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.

LEAD, TOTAL	ND (0.05)	mg/L
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
OIL AND GREASE	ND (1)	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
SILVER	<0.01	mg/L
THALLIUM	<0.05	mg/L

 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc.

Analytical Report

Project: A3989
Report Date: 07-29-86

Client I.D.: FB1
ERG Sample No.: 02/146359
Matrix: GROUND WATER

Parameter	Result	Units
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (5)	ug/L
BROMODICHLOROMETHANE	ND (5)	ug/L
BROMOFORM	ND (5)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (5)	ug/L
CHLOROBENZENE	ND (5)	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	ND (5)	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (5)	ug/L
DIBROMOCHLOROMETHANE	ND (5)	ug/L
DICHLOROETHANE, 1,1-	ND (5)	ug/L
DICHLOROETHANE, 1,2-	ND (5)	ug/L
DICHLOROETHENE, 1,1-	ND (5)	ug/L
DICHLOROPROPANE, 1,2-	ND (5)	ug/L
ETHYLBENZENE	ND (5)	ug/L
METHYLENE CHLORIDE	ND (15)	ug/L
TETRACHLOROETHANE, 1,1,2,2-	ND (5)	ug/L
TETRACHLOROETHENE	ND (5)	ug/L
TOLUENE	ND (5)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (5)	ug/L
TRANS-1,2-DICHLOROETHYLENE	ND (5)	ug/L
TRICHLOROETHANE, 1,1,1-	ND (5)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (5)	ug/L
TRICHLOROETHENE	ND (5)	ug/L
TRICHLOROFLUOROMETHANE	ND (5)	ug/L
VINYL CHLORIDE	ND (10)	ug/L
ZINC	<0.02	mg/L

Client I.D.: BW1
ERG Sample No.: 02/146360
Matrix: GROUND WATER

Parameter	Result	Units
ANTIMONY	ND (0.12)	mg/L
AVERAGE OF DUPLICATE RUNS		
ARSENIC, TOTAL	ND (0.001)	mg/L
AVERAGE OF DUPLICATE RUNS		
BERYLLIUM, TOTAL	ND (0.005)	mg/L
AVERAGE OF DUPLICATE RUNS		
CADMIUM, TOTAL	<0.01	mg/L
AVERAGE OF DUPLICATE RUNS		

 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc. **Analytical Report**

Project: A3989
Report Date: 07-29-86

Client I.D.: BW1
ERG Sample No: 02/146360
Matrix: GROUND WATER

Parameter	Result	Units
INORGANIC CARBON, TOTAL	<1	mg/L
AVERAGE OF DUPLICATE RUNS		
ORGANIC CARBON, TOTAL	4	mg/L
AVERAGE OF DUPLICATE RUNS		
CHROMIUM, TOTAL	<0.02	mg/L
AVERAGE OF DUPLICATE RUNS		
COPPER	<0.02	mg/L
AVERAGE OF DUPLICATE RUNS		
GC SPECIAL SCAN	0.055	mg/L
Comments: GC SPECIAL SCAN IS FOR TOTAL HYDROCARBONS.		
LEAD, TOTAL	ND (0.05)	mg/L
AVERAGE OF DUPLICATE RUNS		
MERCURY	ND (0.0002)	mg/L
NICKEL, TOTAL	<0.05	mg/L
AVERAGE OF DUPLICATE RUNS		
OIL AND GREASE	1	mg/L
SELENIUM, TOTAL	ND (0.001)	mg/L
AVERAGE OF DUPLICATE RUNS		
SILVER	<0.01	mg/L
AVERAGE OF DUPLICATE RUNS		
THALLIUM	<0.05	mg/L
AVERAGE OF DUPLICATE RUNS		
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (5)	ug/L
BROMODICHLOROMETHANE	ND (5)	ug/L
BROMOFORM	ND (5)	ug/L
BROMOMETHANE	ND (10)	ug/L
CARBON TETRACHLORIDE	ND (5)	ug/L
CHLOROBENZENE	ND (5)	ug/L
CHLOROETHANE	ND (10)	ug/L
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/L
CHLOROFORM	ND (5)	ug/L
CHLOROMETHANE	ND (10)	ug/L
CIS-1,3-DICHLOROPROPENE	ND (5)	ug/L
DIBROMOCHLOROMETHANE	ND (5)	ug/L
DICHLOROETHANE, 1,1-	ND (5)	ug/L
DICHLOROETHANE, 1,2-	ND (5)	ug/L
DICHLOROETHENE, 1,1-	ND (5)	ug/L
DICHLOROPROPANE, 1,2-	ND (5)	ug/L
ETHYLBENZENE	ND (5)	ug/L
METHYLENE CHLORIDE	ND (15)	ug/L

 See last page for explanation of symbols.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

TMA ERG
Thermo Analytical Inc.

Analytical Report

Project: A3989
Report Date: 07-29-86

Client I.D.: BW1
ERG Sample No.: 02/146360
Matrix: GROUND WATER

Parameter	Result	Units
TETRACHLOROETHANE, 1,1,2,2-	ND (5)	ug/L
TETRACHLOROETHENE	ND (5)	ug/L
TOLUENE	ND (5)	ug/L
TRANS-1,3-DICHLOROPROPENE	ND (5)	ug/L
TRANS-1,2-DICHLOROETHYLENE	ND (5)	ug/L
TRICHLOROETHANE, 1,1,1-	ND (5)	ug/L
TRICHLOROETHANE, 1,1,2-	ND (5)	ug/L
TRICHLOROETHENE	ND (5)	ug/L
TRICHLOROFLUOROMETHANE	ND (5)	ug/L
VINYL CHLORIDE	ND (10)	ug/L
ZINC	<0.02	mg/L

AVERAGE OF DUPLICATE RUNS

SD-Sample damaged
FR-See field report for result
SR-See attached report
NA-Result not applicable to test

ND-Nondetected, Detection limit in ()
<-Positive result at an unquantifiable concentration below indicated level

Thank you for your business.

Table A-6. Results of 2/17/86 Groundwater Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

30 May 1985
Sample No. 17630

SAMPLE DESCRIPTION: 30' BGS I-3

Date Taken: 4/27/85

Date Received: 5/1/85

Phosphorus, tot.	5386.	ug/g	Copper	[illegible]95	ug/g
Ortho Phosphate	<2.0	ug/g	Lead	[illegible].9	ug/g
Antimony	192.	ug/g	Mercury	[illegible].05	ug/g
Arsenic	5.11	ug/g	Nickel	25.9	ug/g
Beryllium	<0.5	ug/g	Selenium	0.39	ug/g
Cadmium	2.39	ug/g	Silver	[illegible].6	ug/g
Chromium	233.	ug/g	Thallium	[illegible].9	ug/g
Hydrocarbons	0.01	%	Zinc	[illegible].	ug/g

All results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17630

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 30' BGS I-3

Date Taken: 4/27/85 Date Received: 5/1/85

BASE/NEUTRAL COMPOUNDS

ug/g	Compound	ug/g	Compound
<0.3	Acenaphthene (1B)	<0.3	Nitrobenzene (3B)
<1.7	Benzidine (5B)	<0.3	N-Nitrosodimethylamine (61B)
<0.3	1,2,4-Trichlorobenzene (8B)	<0.3	N-Nitrosodiphenylamine (62B)
<0.3	Hexachlorobenzene (9B)	<0.3	N-Nitrosodi-n-propylamine (63B)
<0.3	Hexachloroethane (12B)	<0.3	Bis(2-Ethylhexyl) Phthalate (66B)
<0.3	Bis(2-chloroethyl)Ether (18B)	<0.3	Butyl Benzyl Phthalate (67B)
<0.3	2-Chloronaphthalene (20B)	<0.3	Di-N-Butyl Phthalate (68B)
<0.3	1,2-Dichlorobenzene (25B)	<0.3	Di-N-Octyl Phthalate (69B)
<0.3	1,3-Dichlorobenzene (26B)	<0.3	Diethyl Phthalate (70B)
<0.3	1,4-Dichlorobenzene (27B)	<0.3	Dimethyl Phthalate (71B)
<0.9	3,3'-Dichlorobenzidine (28B)	<0.3	Benzo(a)Anthracene (72B)
<0.3	2,4-Dinitrotoluene (35B)	<0.3	Benzo(a)Pyrene (73B)
<0.3	2,6-Dinitrotoluene (36B)	<0.3	Benzo(b)Fluoranthene (74B)
<0.3	1,2-Diphenylhydrazine (37B)	<0.3	Benzo(k)Fluoranthene (75B)
<0.3	Fluoranthene (39B)	<0.3	Chrysene (76B)
<0.3	4-Chlorophenyl Phenyl Ether	<0.3	Acenaphthylene (77B)
<0.3	4-Bromophenyl Phenyl Ether	<0.3	Anthracene (78B
<0.3	Bis(2-Chloroisopropyl)Ether	<0.3	Benzo(ghi)Perylene (79B)
<0.3	Bis(2-Chloroethoxy)Methane	<0.3	Fluorene (80B)
<0.3	Hexachlorobutadiene (52B)	<0.3	Phenanthrene (81B)
<0.9	Hexachlorocyclopentadiene (53B)	<0.3	Dibenzo(a,h)Anthracene (82B)
<0.3	Isophorone (54B)	<0.3	Ideno(1,2,3-cd)Pyrene (83B)
<0.3	Naphthalene (55B)	<0.3	Pyrene (84B)

ACID COMPOUNDS

<0.3	2,4,6-Trichlorophenol (21A)	<0.3	4-Nitrophenol (58A)
<0.3	4-Chloro-3-Methylphenol (22A)	<0.9	2,4-Dinitrophenol (59A)
<0.3	2-Chlorophenol (24A)	<0.9	2-Methyl-4,6-dinitrophenol (60A)
<0.3	2,4-Dichlorophenol (31A)	<0.3	Pentachlorophenol (64A)
<0.3	2,4-Dimethylphenol (34A)	<0.3	Phenol (65A)
<0.3	2-Nitrophenol (57A)		

DIOXIN

ND 2,3,7,8-Tetrachlorodibenzo-p-dioxin

ND = None Detected

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17630

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 30' BGS I-3

Date Taken: 4.27.85

Date Received: 5.1.85

VOLATILE COMPOUNDS

ug/g	Compound	ug/g	Compound
1.0	Acrolein (2V)	<0.5	1,2-Trans-Dichloroethylene (30V)
1.0	Acrylonitrile (3V)	<0.5	1,2-Dichloropropane (32V)
<0.5	Benzene (4V)	<0.5	1,3-Dichloropropylene (33V)
<0.5	Carbon Tetrachloride (6V)	<0.5	Ethylbenzene (37V)
<0.5	Chlorobenzene (7V)	<1.0	Methylene Chloride (44V)
<0.5	1,2-Dichloroethane (10V)	<2.0	Methyl Chloride (45V)
<0.5	1,1,1-Trichloroethane (11V)	<2.0	Methyl Bromide (46V)
<0.5	1,1-Dichloroethane (13V)	<1.0	Bromoform (47V
<1.0	1,1,2-Trichloroethane (14V)	<0.5	Dichlorobromomethane (48V)
<1.0	1,1,2,2-Tetrachloroethane	<1.0	Chlorodibromomethane (51V)
<2.0	Chloroethane (16V)	<0.5	Tetrachloroethylene (85V)
<5.0	2-Chloroethylvinyl Ether	<0.5	Toluene (86V)
<5.0	Chloroform (23V)	<0.5	Trichloroethylene (87V)
<5.0	1,1-Dichloroethylene (29V)	<2.0	Vinyl Chloride (88V)

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17630

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 30' BGS I-3

Date Taken: 4/27/85

Date Received: 5/1/85

PESTICIDES

ng/g	Compound	ng/g	Compound
<4	Aldrin (89P)	<3	alpha-B[illegible] (102P)
<3	Dieldrin (90)	<6	beta - [illegible] (103P)
<10	Chlordane (91P)	<6	gamma-BHC (104P)
<5	4,4'-DDT (92P)	<3	delta-BHC (105P)
<3	4,4'-DDE (93P)	<100	PCB-1242 (106P)
<4	4,4'-DDD (94P)	<100	PCB-1254 (107P)
<3	alpha-Endosulfan (95P)	<300	PCB-1221 (108P)
<4	beta-Endosulfan (96P)	<300	PCB-1232 (109P)
<4	Endosulfan Sulfate (97P)	<100	PCB-1248 (110P)
<4	Endrin (98P)	<30	PCB-1260 (111P)
<8	Endrin Aldehyde (99P)	<100	PCB-1016 (112P)
<4	Heptachlor (100P)	<100	Toxaphene (113P)
<3	Heptachlor Epoxide (101P)		

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

qualab inc.
)09 Burnet Rd.
ustin TX 78758
2-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17631

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: P-1 27'

Date Taken: 4/23/85

Date Received: 5/1/85

Phosphorus, tot.	416.	ug/g	Copper	6.86	ug/g
Ortho Phosphate	94.6	ug/g	Lead	76.5	ug/g
Antimony	199.	ug/g	Mercury	<0.05	ug/g
Arsenic	4.12	ug/g	Nickel	28.2	ug/g
Beryllium	<0.5	ug/g	Selenium	<0.05	ug/g
Cadmium	8.53	ug/g	Silver	11.9	ug/g
Chromium	33.5	ug/g	Thallium	54.8	ug/g
Hydrocarbons	0.02	%	Zinc	36.1	ug/g

All results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17631

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: P-1 27'

Date Taken: 4/23/85 Date Received: 5/1 85

BASE/NEUTRAL COMPOUNDS

ug/g	Compound	ug/g	Compound
<0.3	Acenaphthene (1B)	<0.3	Nitrobenzene (6B)
<1.7	Benzidine (5B)	<0.3	N-Nitrosodimethylamine (61B)
<0.3	1,2,4-Trichlorobenzene (8B)	<0.3	N-Nitrosodiphenylamine (62B)
<0.3	Hexachlorobenzene (9B)	<0.3	N-Nitrosodi-n-propylamine (63B)
<0.3	Hexachloroethane (12B)	<0.3	Bis(2-Ethylhexyl)Phthalate (66B)
<0.3	Bis(2-chloroethyl)Ether (18B)	<0.3	Butyl Benzyl Phthalate (67B)
<0.3	2-Chloronaphthalene (20B)	<0.3	Di-N-Butyl Phthalate (68B)
<0.3	1,2-Dichlorobenzene (25B)	<0.3	Di-N-Octyl Phthalate (69B)
<0.3	1,3-Dichlorobenzene (26B)	<0.3	Diethyl Phthalate (70B)
<0.3	1,4-Dichlorobenzene (27B)	<0.3	Dimethyl Phthalate (71B)
<0.9	3,3'-Dichlorobenzidine (28B)	<0.3	Benzo(a)Anthracene (72B)
<0.3	2,4-Dinitrotoluene (35B)	<0.3	Benzo(a)Pyrene (73B)
<0.3	2,6-Dinitrotoluene (36B)	<0.3	Benzo(b)Fluoranthene (74B)
0.3	1,2-Diphenylhydrazine (37B)	<0.3	Benzo(k)Fluoranthene (75B)
0.3	Fluoranthene (39B)	<0.3	Chrysene (76B
0.3	4-Chlorophenyl Phenyl Ether	<0.3	Acenaphthylene (77B)
0.3	4-Bromophenyl Phenyl Ether	<0.3	Anthracene (7)
0.3	Bis(2-Chloroisopropyl)Ether	<0.3	Benzo(ghi)Perylene (79B)
0.3	Bis(2-Chloroethoxy)Methane	<0.3	Fluorene (80B
0.3	Hexachlorobutadiene (52B)	<0.3	Phenanthrene (81B)
0.9	Hexachlorocyclopentadiene (53B)	<0.3	Dibenzo(a,h)Anthracene (82B)
0.3	Isophorone (54B)	<0.3	Ideno(1,2,3-c) Pyrene (83B)
0.3	Naphthalene (55B)	<0.3	Pyrene (84B)

ACID COMPOUNDS

1.3	2,4,6-Trichlorophenol (21A)	<0.3	4-Nitrophenol (58A)
1.3	4-Chloro-3-Methylphenol (22A)	<0.9	2,4-Dinitrophenol (59A)
1.3	2-Chlorophenol (24A)	<0.9	2-Methyl-4,6-dinitrophenol (60A)
.3	2,4-Dichlorophenol (31A)	<0.3	Pentachlorophenol (64A)
.3	2,4-Dimethylphenol (34A)	<0.3	Phenol (65A)
.3	2-Nitrophorenol (57A)		

DIOXIN

2,3,7,8-Tetrachlorodibenzo-p-dioxin

= None Detected

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17631

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: P-1 27'

Date Taken: 4/23/85

Date Receiv 5 1 85

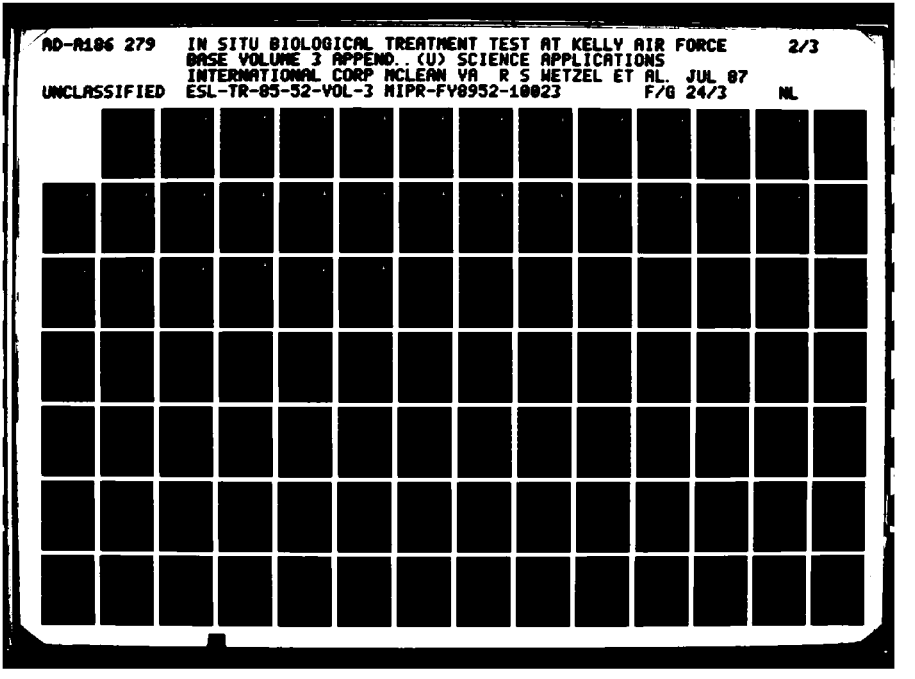
VOLATILE COMPOUNDS

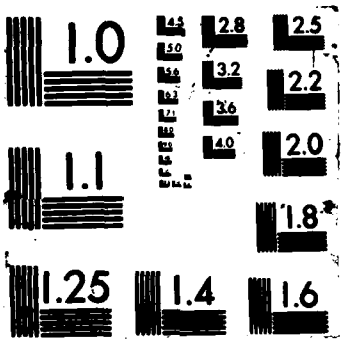
ug/g	Compound	ug/g	Compound
1.0	Acrolein (2V)	<0.5	1,2-Trans-Dichloroethylene (30V)
1.0	Acrylonitrile (3V)	<0.5	1,2-Dichloropropane (32V)
<0.5	Benzene (4V)	<0.5	1,3-Dichloropropylene (33V)
<0.5	Carbon Tetrachloride (6V)	<0.5	Ethylbenzene (V)
<0.5	Chlorobenzene (7V)	<1.0	Methylene Chloride (44V)
<0.5	1,2-Dichloroethane (10V)	<2.0	Methyl Chloride (45V)
<0.5	1,1,1-Trichloroethane (11V)	<2.0	Methyl Bromide (46V)
<0.5	1,1-Dichloroethane (13V)	<1.0	Bromoform (47V
<1.0	1,1,2-Trichloroethane (14V)	<0.5	Dichlorobromomethane (48V
<1.0	1,1,2,2-Tetrachloroethane	<1.0	Chlorodibromomethane (51V
<2.0	Chloroethane (16V)	<0.5	Tetrachloroethylene (85V
<5.0	2-Chloroethylvinyl Ether	<0.5	Toluene (86V)
<5.0	Chloroform (23V)	<0.5	Trichloroethylene (87V
<5.0	1,1-Dichloroethylene (29V)	<2.0	Vinyl Chloride (88V

Results are on a dry weight basis

Pam Tape

Table A-7. Results of Initial Soil Sampling


AD-A186 279 IN SITU BIOLOGICAL TREATMENT TEST AT KELLY AIR FORCE 2/3
BASE VOLUME 3 APPEND. (U) SCIENCE APPLICATIONS
INTERNATIONAL CORP MCLEAN VA R S WETZEL ET AL. JUL 87
UNCLASSIFIED ESL-TR-85-52-VOL-3 MIPR-FY8952-10023 F/G 24/3 NL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1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17631

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: P-1 27'

Date Taken: 4/23/85 Date Received: 5/1/85

PESTICIDES

ng/g	Compound	ng/g	Compound
<4	Aldrin (89P)	<3	alpha-BHC (102P)
<3	Dieldrin (90)	<6	beta - BHC (103P)
<10	Chlordane (91P)	<6	gamma-BHC (104P)
<5	4,4'-DDT (92P)	<3	delta-BHC (105P)
<3	4,4'-DDE (93P)	<100	PCB-1242 (1[illegible]P)
<4	4,4'-DDD (94P)	<100	PCB-1254 (1[illegible]P)
<3	alpha-Endosulfan (95P)	<300	PCB-1221 (1[illegible]P)
<4	beta-Endosulfan (96P)	<300	PCB-1232 (1[illegible]P)
<4	Endosulfan Sulfate (97P)	<100	PCB-124B (1[illegible]P)
<4	Endrin (98P)	<30	PCB-1260 (1[illegible]P)
<8	Endrin Aldehyde (99P)	<100	PCB-1016 (1[illegible]P)
<4	Heptachlor (100P)	<100	Toxaphene ([illegible]P)
<3	Heptachlor Epoxide (101P)		

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17632

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: I2 20' BGS

Date Taken: 4/27/85

Date Received: 5/1/85

Phosphorus, tot.	266.	ug/g	Copper	5.77	ug/g
Ortho Phosphate	43.0	ug/g	Lead	.8	ug/g
Antimony	124.	ug/g	Mercury	.05	ug/g
Arsenic	2.39	ug/g	Nickel	.3	ug/g
Beryllium	<0.5	ug/g	Selenium	<0.05	ug/g
Cadmium	5.67	ug/g	Silver	.78	ug/g
Chromium	9.34	ug/g	Thallium	.1	ug/g
Hydrocarbons	0.02	%	Zinc	.9	ug/g

All results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17632

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 12 20' BGS

Date Taken: 4/27/85 Date Received: 5/1/85

BASE/NEUTRAL COMPOUNDS

ug/g	Compound	ug/g	Compound
<0.3	Acenaphthene (1B)	<0.3	Nitrobenzene (56B)
<1.7	Benzidine (5B)	<0.3	N-Nitrosodimethylamine (61B)
<0.3	1,2,4-Trichlorobenzene (8B)	<0.3	N-Nitrosodiphenylamine (62B)
<0.3	Hexachlorobenzene (9B)	<0.3	N-Nitrosodi-n- opylamine (63B)
<0.3	Hexachloroethane (12B)	<0.3	Bis(2-Ethylhe.)Phthalate (66B)
<0.3	Bis(2-chloroethyl)Ether (13B)	<0.3	Butyl Benzyl hthalate (67B)
<0.3	2-Chloronaphthalene (20B)	<0.3	Di-N-Butyl Ph late (68B)
<0.3	1,2-Dichlorobenzene (25B)	<0.3	Di-N-Octyl Ph late (69B)
<0.3	1,3-Dichlorobenzene (26B)	<0.3	Diethyl Phthal e (70B)
0.3	1,4-Dichlorobenzene (27B)	<0.3	Dimethyl Phthalate (71B)
0.9	3,3'-Dichlorobenzidine (28B)	<0.3	Benzo(a)Anthra ene (72B)
0.3	2,4-Dinitrotoluene (35B)	<0.3	Benzo(a)Pyrene 73B)
0.3	2,6-Dinitrotoluene (36B)	<0.3	Benzo(b)Fluora hene (74B)
<0.3	1,2-Diphenylhydrazine (37B)	<0.3	Benzo(k)Fluora nene (75B)
<0.3	Fluoranthene (39B)	<0.3	Chrysene (76B)
<0.3	4-Chlorophenyl Phenyl Ether	<0.3	Acenaphthylene 77B)
<0.3	4-Bromophenyl Phenyl Ether	<0.3	Anthracene (78
<0.3	Bis(2-Chloroisopropyl)Ether	<0.3	Benzo(ghi)Pery ne (79B)
<0.3	Bis(2-Chloroethoxy)Methane	<0.3	Fluorene (80B)
<0.3	Hexachlorobutadiene (52B)	<0.3	Phenanthrene (B)
<0.9	Hexachlorocyclopentadiene (53B)	<0.3	Dibenzo(a,h)An racene (82B)
<0.3	Isophorone (54B)	<0.3	Ideno(1,2,3-cd yrene (83B)
<0.3	Naphthalene (55B)	<0.3	Pyrene (84B)

ACID COMPOUNDS

<3	2,4,6-Trichlorophenol (21A)	<0.3	4-Nitrophenol 58A)
<3	4-Chloro-3-Methylphenol (22A)	<0.9	2,4-Dinitrophenol (59A)
<3	2-Chlorophenol (24A)	<0.9	2-Methyl-4,6-dinitrophenol 60A)
<3	2,4-Dichlorophenol (31A)	<0.3	Pentachlorophenol (64A)
<3	2,4-Dimethylphenol (34A)	<0.3	Phenol (65A)
<3	2-Nitrophorenol (57A)		

DIOXIN

2,3,7,8-Tetrachlorodibenzo-p-dioxin

ND = None Detected

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

equalab inc.
3909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17632

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 12' 20' BGS

Date Taken: 4/27/85

Date Receive' 5/1 85

VOLATILE COMPOUNDS

ug/g	Compound	ug/g	Compound
1.0	Acrolein (2V)	<0.5	1,2-Trans-Dichl:oethylene (30V)
1.0	Acrylonitrile (3V)	<0.5	1,2-Dichloropro:ene (32V)
<0.5	Benzene (4V)	<0.5	1,3-Dichloropro:lene (33V)
<0.5	Carbon Tetrachloride (6V)	<0.5	Ethylbenzene (3)
<0.5	Chlorobenzene (7V)	<1.0	Methylene Chlor e (44V)
<0.5	1,2-Dichloroethane (10V)	<2.0	Methyl Chloride 45V)
<0.5	1,1,1-Trichloroethane (11V)	<2.0	Methyl Bromide 5V)
<0.5	1,1-Dichloroethane (13V)	<1.0	Bromoform (47V)
<1.0	1,1,2-Trichloroethane (14V)	<0.5	Dichlorobromome ane (48V)
<1.0	1,1,2,2-Tetrachloroethane	<1.0	Chlorodibromome ane (51V)
<2.0	Chloroethane (16V)	<0.5	Tetrachloroethy ne 85V)
<5.0	2-Chloroethylvinyl Ether	<0.5	Toluene (86V)
<5.0	Chloroform (23V)	<0.5	Trichloroethyle (87V)
<5.0	1,1-Dichloroethylene (29V)	<2.0	Vinyl Chloride 88V)

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

squalab inc.
1909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17632

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 11 20' BGS

Date Taken: 4/27/85

Date Received: 5/1/85

PESTICIDES

ng/g	Compound	ng/g	Compound
<4	Aldrin (89P)	<3	alpha-BHC (1[illegible]P)
<3	Dieldrin (90)	<6	beta - BHC (1[illegible]P)
<10	Chlordane (91P)	<6	gamma-BHC (1[illegible]P)
<5	4,4'-DDT (92P)	<3	delta-BHC (1[illegible]P)
<3	4,4'-DDE (93P)	<100	PCB-1242 (10[illegible]
<4	4,4'-DDD (94P)	<100	PCB-1254 (10[illegible]
<3	alpha-Endosulfan (95P)	<300	PCB-1221 (10[illegible]
<4	beta-Endosulfan (96P)	<300	PCB-1232 (10[illegible]
<4	Endosulfan Sulfate (97P)	<100	PCB-1248 (11[illegible]
<4	Endrin (98P)	<30	PCB-1260 (11[illegible]
<8	Endrin Aldehyde (99P)	<100	PCB-1016 (11[illegible]
<4	Heptachlor (100P)	<100	Toxaphene (11[illegible]
<3	Heptachlor Epoxide (101P)		

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

ilab inc.
Burnet Rd.
n TX 78758
35-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17633

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: P1 22'

Date Taken: 4/22/85 Date Received: 5/1/85

Phosphorus, tot.	76.4	ug/g	Copper	6.[illegible]	ug/g
Ortho Phosphate	31.2	ug/g	Lead	38.	ug/g
Antimony	249.	ug/g	Mercury	0.[illegible]	ug/g
Arsenic	2.76	ug/g	Nickel	27.2	ug/g
Beryllium	<0.5	ug/g	Selenium	<0.[illegible]	ug/g
Cadmium	9.30	ug/g	Silver	12.4	ug/g
Chromium	56.6	ug/g	Thallium	59.[illegible]	ug/g
Hydrocarbons	0.05	%	Zinc	25.	ug/g

All results are on a dry weight basis

[illegible]
Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

iqualab inc.
909 Burnet Rd.
iustin TX 78758
12-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17633

JRB ASSOCIATES
3400 West Park Drive
4cLean VA 22102

SAMPLE DESCRIPTION: P\ 22'

Date Taken: 4/22/85

Date Received: 5/1/85

BASE/NEUTRAL COMPOUNDS

ug/g	Compound	ug/g	Compound
<0.3	Acenaphthene (1B)	<0.3	Nitrobenzene
<1.7	Benzidine (5B)	<0.3	N-Nitrosodimet. amine (61B)
<0.3	1,2,4-Trichlorobenzene (8B)	<0.3	N-Nitrosodiphe amine (62B)
<0.3	Hexachlorobenzene (9B)	<0.3	N-Nitrosodi-n- pylamine (63B)
<0.3	Hexachloroethane (12B)	<0.3	Bis(2-Ethylhex. Phthalate (66B)
<0.3	Bis(2-chloroethyl)Ether (18B)	<0.3	Butyl Benzyl Ph alate (67B)
<0.3	2-Chloronaphthalene (20B)	<0.3	Di-N-Butyl Phth ate (68B)
<0.3	1,2-Dichlorobenzene (25B)	<0.3	Di-N-Octyl Phth ate (69B)
<0.3	1,3-Dichlorobenzene (26B)	<0.3	Diethyl Phthala (70B)
<0.3	1,4-Dichlorobenzene (27B)	<0.3	Dimethyl Phthal e (71B)
<0.9	3,3'-Dichlorobenzidine (28B)	<0.3	Benzo(a)Anthrac e (72B)
<0.3	2,4-Dinitrotoluene (35B)	<0.3	Benzo(a)Pyrene B)
<0.3	2,6-Dinitrotoluene (36B)	<0.3	Benzo(b)Fluoran ene (74B)
<0.3	1,2-Diphenylhydrazine (37B)	<0.3	Benzo(k)Fluoran ene (75B)
<0.3	Fluoranthene (39B)	<0.3	Chrysene (76B)
<0.3	4-Chlorophenyl Phenyl Ether	<0.3	Acenaphthylene B)
<0.3	4-Bromophenyl Phenyl Ether	<0.3	Anthracene (78B
<0.3	Bis(2-Chloroisopropyl)Ether	<0.3	Benzo(ghi)Peryl e (79B)
<0.3	Bis(2-Chloroethoxy)Methane	<0.3	Fluorene (80B)
<0.3	Hexachlorobutadiene (52B)	<0.3	Phenanthrene (81B)
<0.9	Hexachlorocyclopentadiene (53B)	<0.3	Dibenzo(a,h)Ant acene (82B)
<0.3	Isophorone (54B)	<0.3	Ideno(1,2,3-cd) yrene (83B
<0.3	Naphthalene (55B)	<0.3	Pyrene (84B)

ACID COMPOUNDS

<0.3	2,4,6-Trichlorophenol (21A)	<0.3	4-Nitrophenol (58A)
<0.3	4-Chloro-3-Methylphenol (22A)	<0.9	2,4-Dinitrophenol (59A)
<0.3	2-Chlorophenol (24A)	<0.9	2-Methyl-4,6-dinitrophenol (60A)
<0.3	2,4-Dichlorophenol (31A)	<0.3	Pentachlorophenol (64A)
<0.3	2,4-Dimethylphenol (34A)	<0.3	Phenol (65A)
<0.3	2-Nitrophorenol (57A)		

DIOXIN

ND 2,3,7,8-Tetrachlorodibenzo-p-dioxin

ND = None Detected

Pam Pope

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17633

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: P! 22'

Date Taken: 4/22/85

Date Received: 5/1/85

VOLATILE COMPOUNDS

ug/g	Compound	ug/g	Compound
1.0	Acrolein (2V)	<0.5	1,2-Trans-Dichloroethylene (30V)
1.0	Acrylonitrile (3V)	<0.5	1,2-Dichloropropane (32V)
<0.5	Benzene (4V)	<0.5	1,3-Dichloropropylene (33V)
<0.5	Carbon Tetrachloride (6V)	<0.5	Ethylbenzene (38
<0.5	Chlorobenzene (7V)	<1.0	Methylene Chloride (44V)
<0.5	1,2-Dichloroethane (10V)	<2.0	Methyl Chloride (45V)
<0.5	1,1,1-Trichloroethane (11V)	<2.0	Methyl Bromide (47V)
<0.5	1,1-Dichloroethane (13V)	<1.0	Bromoform (47V)
<1.0	1,1,2-Trichloroethane (14V)	<0.5	Dichlorobromomethane (48V)
<1.0	1,1,2,2-Tetrachloroethane	<1.0	Chlorodibromomethane (51V)
<2.0	Chloroethane (16V)	<0.5	Tetrachloroethylene (85V)
<5.0	2-Chloroethylvinyl Ether	<0.5	Toluene (86V)
<5.0	Chloroform (23V)	<0.5	Trichloroethylene (87V)
<5.0	1,1-Dichloroethylene (29V)	<2.0	Vinyl Chloride (88V)

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17633

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: P! 22'

Date Taken: 4/22/85

Date Received: 5/1/85

PESTICIDES

ng/g	Compound	ng/g	Compound
<4	Aldrin (89P)	<3	alpha-BHC (102P)
<3	Dieldrin (90)	<6	beta - BHC (103P)
<10	Chlordane (91P)	<6	gamma-BHC (104P)
<5	4,4'-DDT (92P)	<3	delta-BHC (105P)
<3	4,4'-DDE (93P)	<100	PCB-1242 (106P)
<4	4,4'-DDD (94P)	<100	PCB-1254 (107P)
<3	alpha-Endosulfan (95P)	<300	PCB-1221 (108P)
<4	beta-Endosulfan (96P)	<300	PCB-1232 (109P)
<4	Endosulfan Sulfate (97P)	<100	PCB-1248 (110P)
<4	Endrin (98P)	<30	PCB-1260 (111P)
<8	Endrin Aldehyde (99P)	<100	PCB-1016 (112P)
<4	Heptachlor (100P)	<100	Toxaphene (113P)
<3	Heptachlor Epoxide (101P)		

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17634

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 25' BGS I-4

Date Taken: 4/24/85 Date Received: 5/1/85

BASE/NEUTRAL COMPOUNDS

ug/g	Compound	ug/g	Compound
<0.3	Acenaphthene (1B)	<0.3	Nitrobenzene (56B)
<1.7	Benzidine (5B)	<0.3	N-Nitrosodimethylamine (61B)
<0.3	1,2,4-Trichlorobenzene (8B)	<0.3	N-Nitrosodiphenylamine (62B)
<0.3	Hexachlorobenzene (9B)	<0.3	N-Nitrosodi-n-propylamine (63B)
<0.3	Hexachloroethane (12B)	<0.3	Bis(2-Ethylhexyl)Phthalate (66B)
<0.3	Bis(2-chloroethyl)Ether (18B)	<0.3	Butyl Benzyl Phthalate (67B)
<0.3	2-Chloronaphthalene (20B)	<0.3	Di-N-Butyl Phthalate (68B)
<0.3	1,2-Dichlorobenzene (25B)	<0.3	Di-N-Octyl Phthalate (69B)
<0.3	1,3-Dichlorobenzene (26B)	<0.3	Diethyl Phthalate (70B)
<0.3	1,4-Dichlorobenzene (27B)	<0.3	Dimethyl Phthalate (71B)
<0.9	3,3'-Dichlorobenzidine (28B)	<0.3	Benzo(a)Anthracene (72B)
<0.3	2,4-Dinitrotoluene (35B)	<0.3	Benzo(a)Pyrene (73B)
<0.3	2,6-Dinitrotoluene (36B)	<0.3	Benzo(b)Fluoranthene (74B)
<0.3	1,2-Diphenylhydrazine (37B)	<0.3	Benzo(k)Fluoranthene (75B)
<0.3	Fluoranthene (39B)	<0.3	Chrysene (76B)
<0.3	4-Chlorophenyl Phenyl Ether	<0.3	Acenaphthylene (77B)
<0.3	4-Bromophenyl Phenyl Ether	<0.3	Anthracene (78B)
<0.3	Bis(2-Chloroisopropyl)Ether	<0.3	Benzo(ghi)Perylene (79B)
<0.3	Bis(2-Chloroethoxy)Methane	<0.3	Fluorene (80B)
<0.3	Hexachlorobutadiene (52B)	<0.3	Phenanthrene (81B)
<0.9	Hexachlorocyclopentadiene (53B)	<0.3	Dibenzo(a,h)Anthracene (82B)
<0.3	Isophorone (54B)	<0.3	Ideno(1,2,3-cd)Pyrene (83B)
<0.3	Naphthalene (55B)	<0.3	Pyrene (84B)

ACID COMPOUNDS

<0.3	2,4,6-Trichlorophenol (21A)	<0.3	4-Nitrophenol (58A)
<0.3	4-Chloro-3-Methylphenol (22A)	<0.9	2,4-Dinitrophenol (59A)
<0.3	2-Chlorophenol (24A)	<0.9	2-Methyl-4,6-dinitrophenol (60A)
<0.3	2,4-Dichlorophenol (31A)	<0.3	Pentachlorophenol (64A)
<0.3	2,4-Dimethylphenol (34A)	<0.3	Phenol (65A)
<0.3	2-Nitrophorenol (57A)		

DIOXIN

ND 2,3,7,8-Tetrachlorodibenzo-p-dioxin

ND = None Detected

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

ualab inc.
)9 Burnet Rd.
stin TX 78758
2-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17634

IRB ASSOCIATES
3400 West Park Drive
4cLean VA 22102

SAMPLE DESCRIPTION: 25' BGS I-4

Date Taken: 4/24/85

Date Received: 5/1/85

VOLATILE COMPOUNDS

ug/g	Compound	ug/g	Compound
<1.0	Acrolein (2V)	<0.5	1,2-Trans-Dichloroethylene (30V)
<1.0	Acrylonitrile (3V)	<0.5	1,2-Dichloropropane (32V)
<0.5	Benzene (4V)	<0.5	1,3-Dichloropropylene (33V)
<0.5	Carbon Tetrachloride (6V)	<0.5	Ethylbenzene (38V)
<0.5	Chlorobenzene (7V)	<1.0	Methylene Chloride (44V)
<0.5	1,2-Dichloroethane (10V)	<2.0	Methyl Chloride (45V)
<0.5	1,1,1-Trichloroethane (11V)	<2.0	Methyl Bromide (46V)
<0.5	1,1-Dichloroethane (13V)	<1.0	Bromoform (47V)
<1.0	1,1,2-Trichloroethane (14V)	<0.5	Dichlorobromomethane (48V)
<1.0	1,1,2,2-Tetrachloroethane	<1.0	Chlorodibromomethane (51V)
<2.0	Chloroethane (16V)	<0.5	Tetrachloroethylene (85V)
<5.0	2-Chloroethylvinyl Ether	<0.5	Toluene (86V)
<5.0	Chloroform (23V)	<0.5	Trichloroethylene (87V)
<5.0	1,1-Dichloroethylene (29V)	<2.0	Vinyl Chloride (88V)

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

alab inc.
Burnet Rd.
in TX 78758
335-4980

ANALYTICAL REPORT

JRB ASSOCIATES
3400 West Park Drive
McLean VA 22102

30 May 1985
Sample No. 17634

SAMPLE DESCRIPTION: 25' BGS I-4

Date Taken: 4/24/85

Date Received: 5 1 85

PESTICIDES

ng/g	Compound
<4	Aldrin (89P)
<3	Dieldrin (90)
<10	Chlordane (91P)
<5	4,4'-DDT (92P)
<3	4,4'-DDE (93P)
<4	4,4'-DDD (94P)
<3	alpha-Endosulfan (95P)
<4	beta-Endosulfan (96P)
<4	Endosulfan Sulfate (97P)
<4	Endrin (98P)
<8	Endrin Aldehyde (99P)
<4	Heptachlor (100P)
<3	Heptachlor Epoxide (101P)

ng/g	Compound
<3	alpha-BHC (102P)
<6	beta - BHC (103P)
<6	gamma-BHC (104P)
<3	delta-BHC (105P)
<100	PCB-1242 (106P)
<100	PCB-1254 (107P)
<300	PCB-1221 (108P)
<300	PCB-1232 (109P)
<100	PCB-1248 (110P)
<30	PCB-1260 (111P)
<100	PCB-1016 (112P)
<100	Toxaphene (113P)

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

iqualab inc.
1909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17635

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 21 P-3

Date Taken: 4/24/85

Date Received: 5/1/85

Phosphorus, tot.	404.	ug/g	Copper	3.68	ug/g
Ortho Phosphate	41.1	ug/g	Lead	56.5	ug/g
Antimony	209.	ug/g	Mercury	<0.05	ug/g
Arsenic	6.25	ug/g	Nickel	21.6	ug/g
Beryllium	<0.5	ug/g	Selenium	<0.05	ug/g
Cadmium	6.58	ug/g	Silver	7.92	ug/g
Chromium	107.	ug/g	Thallium	38.2	ug/g
Hydrocarbons	0.02	%	Zinc	1.3	ug/g

All results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17635

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 21 P-3

Date Taken: 4/24/85

Date Received: 5/1/85

BASE/NEUTRAL COMPOUNDS

ug/g	Compound	ug/g	Compound
<0.3	Acenaphthene (1B)	<0.3	Nitrobenzene (36B)
<1.7	Benzidine (5B)	<0.3	N-Nitrosodimethylamine (61B)
<0.3	1,2,4-Trichlorobenzene (8B)	<0.3	N-Nitrosodiphenylamine (62B)
<0.3	Hexachlorobenzene (9B)	<0.3	N-Nitrosodi-n-propylamine (63B)
<0.3	Hexachloroethane (12B)	<0.3	Bis(2-Ethylhexyl)Phthalate (66B)
<0.3	Bis(2-chloroethyl)Ether (18B)	<0.3	Butyl Benzyl Phthalate (67B)
<0.3	2-Chloronaphthalene (20B)	<0.3	Di-N-Butyl Phthalate (68B)
<0.3	1,2-Dichlorobenzene (25B)	<0.3	Di-N-Octyl Phthalate (69B)
<0.3	1,3-Dichlorobenzene (26B)	<0.3	Diethyl Phthalate (70B)
<0.3	1,4-Dichlorobenzene (27B)	<0.3	Dimethyl Phthalate (71B)
<0.9	3,3'-Dichlorobenzidine (28B)	<0.3	Benzo(a)Anthracene (72B)
<0.3	2,4-Dinitrotoluene (35B)	<0.3	Benzo(a)Pyrene (73B)
<0.3	2,6-Dinitrotoluene (36B)	<0.3	Benzo(b)Fluoranthene (74B)
<0.3	1,2-Diphenylhydrazine (37B)	<0.3	Benzo(k)Fluoranthene (75B)
<0.3	Fluoranthene (39B)	<0.3	Chrysene (76B
<0.3	4-Chlorophenyl Phenyl Ether	<0.3	Acenaphthylene (77B)
<0.3	4-Bromophenyl Phenyl Ether	<0.3	Anthracene (78B)
<0.3	Bis(2-Chloroisopropyl)Ether	<0.3	Benzo(ghi)Perylene (79B)
<0.3	Bis(2-Chloroethoxy)Methane	<0.3	Fluorene (80B)
<0.3	Hexachlorobutadiene (52B)	<0.3	Phenanthrene (81B)
<0.9	Hexachlorocyclopentadiene (53B)	<0.3	Dibenzo(a,h)Anthracene (82B)
<0.3	Isophorone (54B)	<0.3	Ideno(1,2,3-cd)Pyrene (83B)
<0.3	Naphthalene (55B)	<0.3	Pyrene (84B)

ACID COMPOUNDS

<0.3	2,4,6-Trichlorophenol (21A)	<0.3	4-Nitrophenol (58A)
<0.3	4-Chloro-3-Methylphenol (22A)	<0.9	2,4-Dinitrophenol (59A)
<0.3	2-Chlorophenol (24A)	<0.9	2-Methyl-4,6-dinitrophenol (60A)
<0.3	2,4-Dichlorophenol (31A)	<0.3	Pentachlorophenol (64A)
<0.3	2,4-Dimethylphenol (34A)	<0.3	Phenol (65A)
<0.3	2-Nitrophorenol (57A)		

DIOXIN

ND 2,3,7,8-Tetrachlorodibenzo-p-dioxin

ND = None Detected

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17635

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 21 P-3

Date Taken: 4/24/85

Date Received 5/1/85

VOLATILE COMPOUNDS

ug/g	Compound	ug/g	Compound
1.0	Acrolein (2V)	<0.5	1,2-Trans-Dichloroethylene (30V)
1.0	Acrylonitrile (3V)	<0.5	1,2-Dichloropropane (32V)
<0.5	Benzene (4V)	<0.5	1,3-Dichloropropylene (33V)
<0.5	Carbon Tetrachloride (6V)	<0.5	Ethylbenzene (3[illegible])
<0.5	Chlorobenzene (7V)	<1.0	Methylene Chloride (44V)
<0.5	1,2-Dichloroethane (10V)	<2.0	Methyl Chloride (45V)
<0.5	1,1,1-Trichloroethane (11V)	<2.0	Methyl Bromide (46V)
<0.5	1,1-Dichloroethane (13V)	<1.0	Bromoform (47V)
<1.0	1,1,2-Trichloroethane (14V)	<0.5	Dichlorobromomethane (48V)
<1.0	1,1,2,2-Tetrachloroethane	<1.0	Chlorodibromomethane (51V)
<2.0	Chloroethane (16V)	<0.5	Tetrachloroethylene (85V)
<5.0	2-Chloroethylvinyl Ether	<0.5	Toluene (86V)
<5.0	Chloroform (23V)	<0.5	Trichloroethylene (87V)
<5.0	1,1-Dichloroethylene (29V)	<2.0	Vinyl Chloride (88V)

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17635

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 21 P-3

Date Taken: 4/24/85

Date Received: 5 85

PESTICIDES

ng/g	Compound	ng/g	Compound
<4	Aldrin (89P)	<3	alpha-BHC (92P)
<3	Dieldrin (90)	<6	beta - BHC (93P)
<10	Chlordane (91P)	<6	gamma-BHC (94P)
<5	4,4'-DDT (92P)	<3	delta-BHC (95P)
<3	4,4'-DDE (93P)	<100	PCB-1242 (96P)
<4	4,4'-DDD (94P)	<100	PCB-1254 (97P)
<3	alpha-Endosulfan (95P)	<300	PCB-1221 (98P)
<4	beta-Endosulfan (96P)	<300	PCB-1232 (99P)
<4	Endosulfan Sulfate (97P)	<100	PCB-1248 (100P)
<4	Endrin (98P)	<30	PCB-1260 (101P)
<8	Endrin Aldehyde (99P)	<100	PCB-1016 (102P)
<4	Heptachlor (100P)	<100	Toxaphene (103P)
<3	Heptachlor Epoxide (101P)		

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

equalab inc.
6606 Burnet Rd.
Austin TX 78758
512-835-4900

ANALYTICAL REPORT

30 May 1985
Sample No. 17636

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 28' BGS I-2

Date Taken: 4/30/85

Date Received: 5/1/85

Phosphorus, tot.	6265	ug/g	Copper	6.21	ug/g
Ortho Phosphate	<2.0	ug/g	Lead	60.7	ug/g
Antimony	231.	ug/g	Mercury	<0.05	ug/g
Arsenic	5.20	ug/g	Nickel	33.3	ug/g
Beryllium	<0.5	ug/g	Selenium	<0.05	ug/g
Cadmium	7.12	ug/g	Silver	3.79	ug/g
Chromium	160.	ug/g	Thallium	39.8	ug/g
Hydrocarbons	0.02	%	Zinc	102.	ug/g

All results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17636

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 28' BGS I-2

Date Taken: 4 30 85 Date Received: 5 1 85

BASE/NEUTRAL COMPOUNDS

ug/g	Compound	ug/g	Compound
<0.3	Acenaphthene (1B)	<0.3	Nitrobenzene (56B)
<1.7	Benzidine (5B)	<0.3	N-Nitrosodim ylamine (61B)
<0.3	1,2,4-Trichlorobenzene (8B)	<0.3	N-Nitrosodip ylamine (62B)
<0.3	Hexachlorobenzene (9B)	<0.3	N-Nitrosodi propylamine (63B)
<0.3	Hexachloroethane (12B)	<0.3	Bis(2-Ethyl yl Phthalate (66B)
<0.3	Bis(2-chloroethyl)Ether (18B)	<0.3	Butyl Benzyl thalate (67B)
<0.3	2-Chloronaphthalene (20B)	<0.3	Di-N-Butyl Phthalate (68B)
<0.3	1,2-Dichlorobenzene (25B)	<0.3	Di-N-Octyl Phthalate (69B)
<0.3	1,3-Dichlorobenzene (26B)	<0.3	Diethyl Phtha ate (70B)
<0.3	1,4-Dichlorobenzene (27B)	<0.3	Dimethyl Phth late (71B)
<0.9	3,3'-Dichlorobenzidine (28B)	<0.3	Benzo(a)Anthr ene (72B)
<0.3	2,4-Dinitrotoluene (35B)	<0.3	Benzo(a)Pyren (73B)
<0.3	2,6-Dinitrotoluene (36B)	<0.3	Benzo(b)Fluor thene (74B)
<0.3	1,2-Diphenylhydrazine (37B)	<0.3	Benzo(k)Fluor thene (75B)
<0.3	Fluoranthene (39B)	<0.3	Chrysene (76B)
<0.3	4-Chlorophenyl Phenyl Ether	<0.3	Acenaphthylen (77B)
<0.3	4-Bromophenyl Phenyl Ether	<0.3	Anthracene (78B)
<0.3	Bis(2-Chloroisopropyl)Ether	<0.3	Benzo ghi)Per lene (79B)
<0.3	Bis(2-Chloroethoxy)Methane	<0.3	Fluorene (80B)
<0.3	Hexachlorobutadiene (52B)	<0.3	Phenanthrene (81B)
<0.3	Hexachlorocyclopentadiene (53B)	<0.3	Dibenzo(a,h)A thracene (82B)
<0.3	Isophorone (54B)	<0.3	Ideno 1,2,3-)Pyrene (83B)
<0.3	Naphthalene (55B)	<0.3	Pyrene (84B)

ACID COMPOUNDS

<0.3	2,4,6-Trichlorophenol (21A)	<0.3	4-Nitrophenol (58A)
<0.3	4-Chloro-3-Methylphenol (22A)	<0.9	2,4-Dinitrophenol (59A)
<0.3	2-Chlorophenol (24A)	<0.9	2-Methyl-4,6-Dinitrophenol (60A)
<0.3	2,4-Dichlorophenol (31A	<0.3	Pentachlorophenol (64A)
<0.3	2,4-Dimethylphenol (34A)	<0.3	Phenol (65A
<0.3	2-Nitrophorenol (57A)		

DIOXIN

ND 2,3,7,8-Tetrachlorodibenzo-p-dioxin

ND = None Detected

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

equalab inc.
9009 Burnet Rd.
Austin TX 78758
512-835-4960

ANALYTICAL REPORT

30 May 1985
Sample No. 17636

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 28' BGS I-2

Date Taken: 4/30/85

Date Received 5 : 85

VOLATILE COMPOUNDS

ug/g	Compound	ug/g	Compound
1.0	Acrolein (2V)	<0.5	1,2-Trans-Dichloroethylene (30V)
1.0	Acrylonitrile (3V)	<0.5	1,2-Dichloropropane (32V)
<0.5	Benzene (4V)	<0.5	1,3-Dichloropropylene (33V)
<0.5	Carbon Tetrachloride (6V)	<0.5	Ethylbenzene (3[illegible]V)
<0.5	Chlorobenzene (7V)	<1.0	Methylene Chloride (44V)
<0.5	1,2-Dichloroethane (10V)	<2.0	Methyl Chloride (45V)
<0.5	1,1,1-Trichloroethane (11V)	<2.0	Methyl Bromide (46V)
<0.5	1,1-Dichloroethane (13V)	<1.0	Bromoform (47V)
<1.0	1,1,2-Trichloroethane (14V)	<0.5	Dichlorobromomethane (48V)
<1.0	1,1,2,2-Tetrachloroethane	<1.0	Chlorodibromomethane (51V)
<2.0	Chloroethane (16V)	<0.5	Tetrachloroethylene (85V)
<5.0	2-Chloroethylvinyl Ether	<0.5	Toluene (86V)
<5.0	Chloroform (23V)	<0.5	Trichloroethylene (87V)
<5.0	1,1-Dichloroethylene (29V)	<2.0	Vinyl Chloride (88V)

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
3908 Burnet Rd
Austin TX 78758
512-836-4980

ANALYTICAL REPORT

30 May 1995
Sample No: 17636

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION 28' BGS 1-2

Date Taken 4 30 95 Date Received 5

PESTICIDES

ng/g	Compound	ng/g	Compound
<4	Aldrin (89P)	<3	alpha-BHC (102P
<3	Dieldrin (90)	<6	beta - BHC (10
<10	Chlordane (91P	<6	gamma-BHC (104
<5	4,4'-DDT (92P)	<3	delta-BHC (105
<3	4,4'-DDE (93P	<100	PCB-1242 (106P
<4	4,4'-DDD (94P)	<100	PCB-1254 (107P
<3	alpha-Endosulfan (95P	<300	PCB-1221 (108P
<4	beta-Endosulfan (96P)	<300	PCB-1232 (109P
<4	Endosulfan Sulfate (97P	<100	PCB-1248 (110P
<4	Endrin (98P)	<30	PCB-1260 (111P
<8	Endrin Aldehyde (99P	<100	PCB-1016 (112P
<4	Heptachlor (100P	<100	Toxaphene (113
<3	Heptachlor Epoxide (101P		

Results are on a dry weight basis

Pam Dupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
1909 Burnet Rd.
Austin TX 78758
512-835-4960

ANALYTICAL REPORT

30 May 1985
Sample No. 17637

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 25' BGS I-3

Date Taken: 4.26.85

Date Received: 5.1.85

Phosphorus, tot.	4027.	ug g	Copper	5.	ug g
Ortho Phosphate	2.92	ug g	Lead	54	ug g
Antimony	175.	ug g	Mercury	<0.1	ug g
Arsenic	3.39	ug g	Nickel	31.	ug g
Beryllium	<0.5	ug g	Selenium	0.6	ug g
Cadmium	4.16	ug g	Silver	4.4	ug g
Chromium	124.	ug g	Thallium	34.	ug g
Hydrocarbons	0.01	%	Zinc	137	ug g

All results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

ualab inc.
09 Burnet Rd.
stin TX 78758
2-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17637

RB ASSOCIATES
400 West Park Drive
cLean VA 22102

AMPLE DESCRIPTION: 25' BGS I-3

ate Taken: 4 26 85

Date Received: 5 1 85

BASE NEUTRAL COMPOUNDS

ug g	Compound	ug g	Compound
<0.3	Acenaphthene (1B)	<0.3	Nitrobenzene (5B)
<1.7	Benzidine (5B)	<0.3	N-Nitrosodimethyl ne (61B
<0.3	1,2,4-Trichlorobenzene (8B)	<0.3	N-Nitrosodiphenyl ine (62B)
<0.3	Hexachlorobenzene (9B)	<0.3	N-Nitrosodi-n-propylamine (63B)
<0.3	Hexachloroethane (12B)	<0.3	Bis(2-Ethylhexyl) Phthalate (66B
<0.3	Bis(2-chloroethyl)Ether (18B)	<0.3	Butyl Benzyl Phthalate (67B)
<0.3	2-Chloronaphthalene (20B)	<0.3	Di-N-Butyl Phthalate (68B)
<0.3	1,2-Dichlorobenzene (25B)	<0.3	Di-N-Octyl Phthalate (69B)
<0.3	1,3-Dichlorobenzene (26B)	<0.3	Diethyl Phthalate (70B)
<0.3	1,4-Dichlorobenzene (27B)	<0.3	Dimethyl Phthalate (71B)
<0.3	3,3'-Dichlorobenzidine (29B)	<0.3	Benzo(a)Anthracene (72B
<0.3	2,4-Dinitrotoluene (35B)	<0.3	Benzo(a)Pyrene (73
<0.3	2,6-Dinitrotoluene (36B)	<0.3	Benzo(b)Fluoranthene (74B)
<0.3	1,2-Diphenylhydrazine (37B)	<0.3	Benzo(k Fluoranthene (75B
<0.3	Fluoranthene (39B)	<0.3	Chrysene (76B)
<0.3	4-Chlorophenyl Phenyl Ether	<0.3	Acenaphthylene (7
<0.3	4-Bromophenyl Phenyl Ether	<0.3	Anthracene (78B
<0.3	Bis 2-Chloroisopropyl Ether	<0.3	Benzo(ghi)Perylene (79B
<0.3	Bis 2-Chloroethoxy Methane	<0.3	Fluorene (80B
<0.3	Hexachlorobutadiene (52B)	<0.3	Phenanthrene (81B
<0.9	Hexachlorocyclopentadiene (53B	<0.3	Dibenzo(a,h)Anthracene (82B
<0.3	Isophorone (54B)	<0.3	Ideno(1,2,3-cd)Pyrene (83B
<0.3	Naphthalene (55B)	<0.3	Pyrene (84B)

ACID COMPOUNDS

<0.3	2,4,6-Trichlorophenol (21A)	<0.3	4-Nitrophenol (56A
<0.3	4-Chloro-3-Methylphenol (22A)	<0.3	2,4-Dinitrophenol (59A)
<0.3	2-Chlorophenol (24A)	<0.3	2-Methyl-4,6-dinitrophenol (60A
<0.3	2,4-Dichlorophenol (31A	<0.3	Pentachlorophenol (64A)
<0.3	2,4-Dimethylphenol (34A)	<0.3	Phenol (65A)
<0.3	2-Nitrophorenol (57A)		

DIOXIN

ND 2,3,7,8-Tetrachlorodibenzo-p-dioxin

ND = None Detected

Pam Pope

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
3909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17637

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 25' BGS I-3

Date Taken: 4/26 85

Date Received: 5 85

VOLATILE COMPOUNDS

ug/g	Compound	ug/g	Compound
1.0	Acrolein (2V)	<0.5	1,2-Trans-Dichloroethylene (30V)
1.0	Acrylonitrile (3V)	<0.5	1,2-Dichloropropane (32V)
<0.5	Benzene (4V)	<0.5	1,3-Dichloropropylene (33V)
<0.5	Carbon Tetrachloride (6V)	<0.5	Ethylbenzene (38V)
<0.5	Chlorobenzene (7V)	<1.0	Methylene Chloride (44V)
<0.5	1,2-Dichloroethane (10V)	<2.0	Methyl Chloride (45V)
<0.5	1,1,1-Trichloroethane (11V)	<2.0	Methyl Bromide (46V)
<0.5	1,1-Dichloroethane (13V)	<1.0	Bromoform (47V)
<1.0	1,1,2-Trichloroethane (14V)	<0.5	Dichlorobromomethane (48V)
<1.0	1,1,2,2-Tetrachloroethane	<1.0	Chlorodibromomethane (51V)
<2.0	Chloroethane (16V)	<0.5	Tetrachloroethylene (85V)
<5.0	2-Chloroethylvinyl Ether	<0.5	Toluene (86V)
<5.0	Chloroform (23V)	<0.5	Trichloroethylene (87V)
<5.0	1,1-Dichloroethylene (29V)	<2.0	Vinyl Chloride (88V)

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

qualab inc.
909 Burnet Rd.
ustin TX 78758
12-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17637

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 25' BGS I-3

Date Taken: 4/26/85 Date Received: 5 1

PESTICIDES

ng/g	Compound	ng/g	Compound
<4	Aldrin (89P)	<3	alpha-BHC (102P
<3	Dieldrin (90)	<6	beta - BHC (103
<10	Chlordane (91P)	<6	gamma-BHC (104P
<5	4,4'-DDT (92P	<3	delta-BHC (105P
<3	4,4'-DDE (93P)	<100	PCB-1242 (106P)
<4	4,4'-DDD (94P)	<100	PCB-1254 (107P)
<3	alpha-Endosulfan (95P)	<300	PCB-1221 (108P)
<4	beta-Endosulfan (96P)	<300	PCB-1232 (109P)
<4	Endosulfan Sulfate (97P)	<100	PCB-1248 (110P)
<4	Endrin (98P)	<30	PCB-1260 (111P
<8	Endrin Aldehyde (99P)	<100	PCB-1016 (112P)
<4	Heptachlor (100P)	<100	Toxaphene (113P
<3	Heptachlor Epoxide (101P)		

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

qualab inc.
309 Burnet Rd.
ustin TX 78758
12-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17638

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 30' BGS I-4

Date Taken: 4/26/85

Date Received: 5/1/85

Phosphorus, tot.	4802.	ug/g	Copper	[illegible]	ug/g
Ortho Phosphate	49.5	ug/g	Lead	3[illegible]7	ug/g
Antimony	92.7	ug/g	Mercury	<0.05	ug/g
Arsenic	4.47	ug/g	Nickel	1[illegible]	ug/g
Beryllium	<0.5	ug/g	Selenium	<[illegible]05	ug/g
Cadmium	2.56	ug/g	Silver	5.[illegible]	ug/g
Chromium	129.	ug/g	Thallium	3[illegible]	ug/g
Hydrocarbons	0.01	%	Zinc	1[illegible]	ug/g

All results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17638

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 30' BGS I-4

Date Taken: 4/26/85

Date Received: 5 1'85

BASE/NEUTRAL COMPOUNDS

ug/g	Compound	ug/g	Compound
<0.3	Acenaphthene (1B)	<0.3	Nitrobenzene (56B)
<1.7	Benzidine (5B)	<0.3	N-Nitrosodimethylamine (61B)
<0.3	1,2,4-Trichlorobenzene (8B)	<0.3	N-Nitrosodiphenylamine (62B)
<0.3	Hexachlorobenzene (9B)	<0.3	N-Nitrosodi-n-propylamine (63B)
<0.3	Hexachloroethane (12B)	<0.3	Bis(2-Ethylhexyl)Phthalate (66B)
<0.3	Bis(2-chloroethyl)Ether (18B)	<0.3	Butyl Benzyl Phthalate (67B)
<0.3	2-Chloronaphthalene (20B)	<0.3	Di-N-Butyl Phthalate (68B)
<0.3	1,2-Dichlorobenzene (25B)	<0.3	Di-N-Octyl Phthalate (69B)
<0.3	1,3-Dichlorobenzene (26B)	<0.3	Diethyl Phthalate (70B)
<0.3	1,4-Dichlorobenzene (27B)	<0.3	Dimethyl Phthalate (71B)
<0.9	3,3'-Dichlorobenzidine (28B)	<0.3	Benzo(a)Anthracene (72B)
<0.3	2,4-Dinitrotoluene (35B)	<0.3	Benzo(a)Pyrene (73B)
<0.3	2,6-Dinitrotoluene (36B)	<0.3	Benzo(b)Fluoranthene (74B)
<0.3	1,2-Diphenylhydrazine (37B)	<0.3	Benzo(k)Fluoranthene (75B)
<0.3	Fluoranthene (39B)	<0.3	Chrysene (76B)
<0.3	4-Chlorophenyl Phenyl Ether	<0.3	Acenaphthylene (77B)
<0.3	4-Bromophenyl Phenyl Ether	<0.3	Anthracene (78B)
<0.3	Bis(2-Chloroisopropyl)Ether	<0.3	Benzo(ghi)Perylene (79B)
<0.3	Bis(2-Chloroethoxy)Methane	<0.3	Fluorene (80B)
<0.3	Hexachlorobutadiene (52B)	<0.3	Phenanthrene (81B)
<0.9	Hexachlorocyclopentadiene (53B)	<0.3	Dibenzo(a,h)Anthracene (82B)
<0.3	Isophorone (54B)	<0.3	Ideno(1,2,3-c,d)Pyrene (83B)
<0.3	Naphthalene (55B)	<0.3	Pyrene (84B)

ACID COMPOUNDS

<0.3	2,4,6-Trichlorophenol (21A)	<0.3	4-Nitrophenol (58A)
<0.3	4-Chloro-3-Methylphenol (22A)	<0.9	2,4-Dinitrophenol (59A)
<0.3	2-Chlorophenol (24A)	<0.9	2-Methyl-4,6-dinitrophenol (60A)
<0.3	2,4-Dichlorophenol (31A)	<0.3	Pentachlorophenol (64A)
<0.3	2,4-Dimethylphenol (34A)	<0.3	Phenol (65A)
<0.3	2-Nitrophorenol (57A)		

DIOXIN

ND 2,3,7,8-Tetrachlorodibenzo-p-dioxin

ND = None Detected

Pam Ju[illegible]

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17638

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 30' BGS I-4

Date Taken: 4/26/85

Date Received: [illegible]/85

VOLATILE COMPOUNDS

ug/g	Compound	ug/g	Compound
1.0	Acrolein (2V)	<0.5	1,2-Trans-Dichloroethylene (30V)
1.0	Acrylonitrile (3V)	<0.5	1,2-Dichloropropane (32V)
<0.5	Benzene (4V)	<0.5	1,3-Dichloropropylene (33V)
<0.5	Carbon Tetrachloride (6V)	<0.5	Ethylbenzene (38V)
<0.5	Chlorobenzene (7V)	<1.0	Methylene Chloride (44V)
<0.5	1,2-Dichloroethane (10V)	<2.0	Methyl Chloride (45V)
<0.5	1,1,1-Trichloroethane (11V)	<2.0	Methyl Bromide (46V)
<0.5	1,1-Dichloroethane (13V)	<1.0	Bromoform (47V)
<1.0	1,1,2-Trichloroethane (14V)	<0.5	Dichlorobromomethane (48V)
<1.0	1,1,2,2-Tetrachloroethane	<1.0	Chlorodibromomethane (51V)
<2.0	Chloroethane (16V)	<0.5	Tetrachloroethylene (85V)
<5.0	2-Chloroethylvinyl Ether	<0.5	Toluene (86V)
<5.0	Chloroform (23V)	<0.5	Trichloroethylene (87V)
<5.0	1,1-Dichloroethylene (29V)	<2.0	Vinyl Chloride (88V)

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

qualab inc.
)09 Burnet Rd.
ustin TX 78758
12-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17638

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 30' BGS I-4

Date Taken: 4/26/85

Date Received: 5 1 [illegible]

PESTICIDES

ng/g	Compound	ng/g	Compound
<4	Aldrin (89P)	<3	alpha-BHC (102
<3	Dieldrin (90)	<6	beta - BHC (10
<10	Chlordane (91P)	<6	gamma-BHC (104
<5	4,4'-DDT (92P)	<3	delta-BHC (105
<3	4,4'-DDE (93P)	<100	PCB-1242 (106P
<4	4,4'-DDD (94P)	<100	PCB-1254 (107P
<3	alpha-Endosulfan (95P)	<300	PCB-1221 (108P
<4	beta-Endosulfan (96P)	<300	PCB-1232 (109P
<4	Endosulfan Sulfate (97P)	<100	PCB-1248 (110P
<4	Endrin (98P)	<30	PCB-1260 (111P
<8	Endrin Aldehyde (99P)	<100	PCB-1016 (112P
<4	Heptachlor (100P)	<100	Toxaphene (11
<3	Heptachlor Epoxide (101P)		

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17639

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 28' BGS P-3

Date Taken: 4/24/85 Date Received: 5 1 85

Phosphorus, tot.	2937.	ug/g	Copper	18	ug/g
Ortho Phosphate	32.2	ug/g	Lead	3	ug/g
Antimony	70.7	ug/g	Mercury	.05	ug/g
Arsenic	4.46	ug/g	Nickel	13.5	ug/g
Beryllium	<0.5	ug/g	Selenium	.05	ug/g
Cadmium	1.85	ug/g	Silver	.06	ug/g
Chromium	98.6	ug/g	Thallium	.3	ug/g
Hydrocarbons	0.02	%	Zinc	5.	ug/g

All results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd.
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17639

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 28' BGS P-3

Date Taken: 4/24/85 Date Received: 5 1 85

BASE NEUTRAL COMPOUNDS

ug/g	Compound	ug/g	Compound
<0.3	Acenaphthene (1B)	<0.3	Nitrobenzene (56B)
<1.7	Benzidine (5B)	<0.3	N-Nitrosodimethylamine (61B
<0.3	1,2,4-Trichlorobenzene (8B)	<0.3	N-Nitrosodiphenylamine (62B
<0.3	Hexachlorobenzene (9B)	<0.3	N-Nitrosodi-n-propylamine (63B
<0.3	Hexachloroethane (12B)	<0.3	Bis(2-Ethylhexyl)Phthalate (66B
<0.3	Bis(2-chloroethyl)Ether (18B)	<0.3	Butyl Benzyl Phthalate (67B)
<0.3	2-Chloronaphthalene (20B)	<0.3	Di-N-Butyl Phthalate (68B)
<0.3	1,2-Dichlorobenzene (25B)	<0.3	Di-N-Octyl Phthalate (69B)
<0.3	1,3-Dichlorobenzene (26B)	<0.3	Diethyl Phthalate (70B)
<0.3	1,4-Dichlorobenzene (27B)	<0.3	Dimethyl Phthalate (71B)
<0.9	3,3'-Dichlorobenzidine (28B)	<0.3	Benzo(a)Anthracene (72B)
<0.3	2,4-Dinitrotoluene (35B)	<0.3	Benzo(a)Pyrene (73B)
<0.3	2,6-Dinitrotoluene (36B)	<0.3	Benzo(b)Fluoranthene (74B
<0.3	1,2-Diphenylhydrazine (37B)	<0.3	Benzo(k)Fluoranthene (75B
<0.3	Fluoranthene (39B)	<0.3	Chrysene (76B
<0.3	4-Chlorophenyl Phenyl Ether	<0.3	Acenaphthylen (77B)
<0.3	4-Bromophenyl Phenyl Ether	<0.3	Anthracene (7
<0.3	Bis(2-Chloroisopropyl)Ether	<0.3	Benzo(ghi)Per ene (79B
<0.3	Bis(2-Chloroethoxy)Methane	<0.3	Fluorene (80B
<0.3	Hexachlorobutadiene (52B)	<0.3	Phenanthrene (81B
<0.9	Hexachlorocyclopentadiene (53B)	<0.3	Dibenzo(a,h)Anthracene (82B
<0.3	Isophorone (54B)	<0.3	Ideno(1,2,3-c)Pyrene (83B
<0.3	Naphthalene (55B)	<0.3	Pyrene (84B)

ACID COMPOUNDS

<0.3	2,4,6-Trichlorophenol (21A)	<0.3	4-Nitrophenol (59A
<0.3	4-Chloro-3-Methylphenol (22A)	<0.9	2,4-Dinitrophenol (60A
<0.3	2-Chlorophenol (24A)	<0.9	2-Methyl-4,6-dinitrophenol (61A
<0.3	2,4-Dichlorophenol (31A)	<0.3	Pentachlorophenol (64A
<0.3	2,4-Dimethylphenol (34A)	<0.3	Phenol (65A
<0.3	2-Nitrophorenol (57A)		

DIOXIN

ND 2,3,7,8-Tetrachlorodibenzo-p-dioxin

ND = None Detected

Pam Jup

Table A-7. Results of Initial Soil Sampling (Continued)

aqualab inc.
9909 Burnet Rd
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

30 May 1985
Sample No. 17639

JRB ASSOCIATES
8400 West Park Drive
McLean VA 22102

SAMPLE DESCRIPTION: 28' BGS P-3

Date Taken 4 24 85

Date Received 5 1 85

VOLATILE COMPOUNDS

ug/g	Compound	ug/g	Compound
1.0	Acrolein (2V)	<0.5	1,2-Trans-Dichloroethylene (3V)
1.0	Acrylonitrile (3V)	<0.5	1,2-Dichloropropane (3V)
<0.5	Benzene (4V)	<0.5	1,3-Dichloropropylene (3V)
<0.5	Carbon Tetrachloride (6V)	<0.5	Ethylbenzene (3)
<0.5	Chlorobenzene (7V)	<1.0	Methylene Chloride (44V)
<0.5	1,2-Dichloroethane (10V)	<2.0	Methyl Chloride (45V)
<0.5	1,1,1-Trichloroethane (11V)	<2.0	Methyl Bromide (47V)
<0.5	1,1-Dichloroethane (13V)	<1.0	Bromoform (47V)
<1.0	1,1,2-Trichloroethane (14V)	<0.5	Dichlorobromomethane (48V)
<1.0	1,1,2,2-Tetrachloroethane	<1.0	Chlorodibromomethane (51V)
<2.0	Chloroethane (16V)	<0.5	Tetrachloroethylene (66V)
<5.0	2-Chloroethylvinyl Ether	<0.5	Toluene (86V)
<5.0	Chloroform (23V)	<0.5	Trichloroethylene (87V)
<5.0	1,1-Dichloroethylene (29V)	<2.0	Vinyl Chloride (88V)

Results are on a dry weight basis

Pam Pope

Table A-7. Results of Initial Soil Sampling (Continued)

aquatab inc.
9908 Burnet Rd
Austin TX 78758
512-835-4980

ANALYTICAL REPORT

JRB ASSOCIATES
9400 West Park Drive
McLean VA 22102

30 May 1985
Sample No. 17639

SAMPLE DESCRIPTION 28' BGS P-3

Date Taken 4 24 85

Date Received 5 1 85

PESTICIDES

ng g	Compound	ng g	Compound
<4	Aldrin (89P)	<3	alpha-BHC (102P
<3	Dieldrin (90)	<6	beta - BHC (103P
<10	Chlordane (91P)	<6	gamma-BHC (104P)
<5	4,4'-DDT (92P)	<3	delta-BHC (105P
<3	4,4'-DDE (93P)	<100	PCB-1242 (6P
<4	4,4'-DDD (94P)	<100	PCB-1254 (7P
<3	alpha-Endosulfan (95P)	<300	PCB-1221 (8P
<4	beta-Endosulfan (96P)	<300	PCB-1232 (9P
<4	Endosulfan Sulfate (97P)	<100	PCB-1248 (10P
<4	Endrin (98P)	<30	PCB-1260 (11P
<8	Endrin Aldehyde (99P)	<100	PCB-1016 (12P
<4	Heptachlor (100P)	<100	Toxaphene (13P
<3	Heptachlor Epoxide (101P)		

Results are on a dry weight basis

Pam Jupe

Table A-7. Results of Initial Soil Sampling (Continued)

ANALYTICAL REPORT

Project A3254
Report Date 08-23-85

ENVIRONMENTAL RESEARCH GROUP, INC.
117 N. FIRST
ANN ARBOR, MICHIGAN 48104 (313) 662-3104

Client P O 16-860025-90
Report 14377

Samples Recvd: 08-07-85
Refer Questions To:
THOMAS CULLEN

Client
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
8400 WESTPARK DRIVE
MC LEAN, VA 22102

Approved

***
Residual Samples Will Be Held
TWO WEEKS
***

Client I D SB-1
ERG Sample No 08/134344
Matrix SOIL
Date Sampled 07-30-85

Parameter	Result	Units
ACID FRACTION (PRIOR POLLS METH 625)		
CHLOROPHENOL, 2-	ND (33)	ug/Kg
NITROPHENOL, 2-	ND (33)	ug/Kg
PHENOL	ND (33)	ug/Kg
DIMETHYLPHENOL, 2,4-	ND (33)	ug/Kg
DICHLOROPHENOL, 2,4-	ND (33)	ug/Kg
TRICHLOROPHENOL, 2,4,6-	ND (33)	ug/Kg
CHLORO-3-METHYLPHENOL, 4-	ND (33)	ug/Kg
DINITROPHENOL, 2,4-	ND (33)	ug/Kg
METHYL-4,6-DINITROPHENOL, 2-	ND (33)	ug/Kg
PENTACHLOROPHENOL	ND (33)	ug/Kg
NITROPHENOL, 4-	ND (33)	ug/Kg
ANTIMONY	ND (50)	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
ARSENIC, TOTAL	ND (2)	mg/Kg
HIGHER DETECTION LIMIT DUE TO MATRIX INTERFERENCE		
B/N FRACTION (PRIOR POLLS METH 625)		
ACENAPTHENE	ND (33)	ug/Kg
ACENAPTHYLENE	ND (33)	ug/Kg
ANTHRACENE	ND (33)	ug/Kg
BENZIDINE	ND (33)	ug/Kg
BENZO(A)ANTHRACENE	ND (33)	ug/Kg
BENZO(A)PYRENE	ND (33)	ug/Kg
BENZO(B)FLUORANTHENE	ND (33)	ug/Kg
BENZO(K)FLUORANTHENE	ND (33)	ug/Kg
BENZO(G,H,I)PERYLENE	ND (33)	ug/Kg
BIS(2-CHLOROETHYL)ETHER	ND (33)	ug/Kg
BIS(2-CHLOROETHOXY)METHANE	ND (33)	ug/Kg
BIS(2-CHLOROISOPROPYL)ETHER	ND (33)	ug/Kg
BIS(2-ETHYLHEXYL)PHTHALATE	ND (33)	ug/Kg
BROMOPHENYL PHENYL ETHER, 4-	ND (33)	ug/Kg
BUTYL BENZYL PHTHALATE	ND (33)	ug/Kg
CHLORONAPHTHALENE, 2-	ND (33)	ug/Kg

 See last page for explanation of symbols

Table A-8. Results of 8/8/85 Soil Sampling

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project A3254
Report Date 08-23-85

Client I.D SB-1
ERG Sample No 08/134344
Matrix SOIL
Date Sampled 07-30-85

Parameter	Result	Units
CHLOROPHENYL PHENYL ETHER, 4-	ND (33)	ug/Kg
CHRYSENE	ND (33)	ug/Kg
DI-N-BUTYLPHTHALATE	ND (33)	ug/Kg
DIBENZO(A,H)ANTHRACENE	ND (33)	ug/Kg
DICHLOROBENZENE, 1,2-	ND (33)	ug/Kg
DICHLOROBENZENE, 1,3-	ND (33)	ug/Kg
DICHLOROBENZENE, 1,4-	ND (33)	ug/Kg
DICHLOROBENZIDINE, 3,3'-	ND (33)	ug/Kg
DIETHYLPHTHALATE	ND (33)	ug/Kg
DIMETHYLPHTHALATE	ND (33)	ug/Kg
DINITROTOLUENE 2,4-	ND (33)	ug/Kg
DINITROTOLUENE 2,6-	ND (33)	ug/Kg
DIOCTYLPHTHALATE	ND (33)	ug/Kg
DIPHENYLHYDRAZINE 1,2-	ND (33)	ug/Kg
FLUORANTHENE	ND (33)	ug/Kg
FLUORENE	ND (33)	ug/Kg
HEXACHLOROBENZENE	ND (33)	ug/Kg
HEXACHLOROBUTADIENE	ND (33)	ug/Kg
HEXACHLOROCYCLOPENTADIENE	ND (33)	ug/Kg
HEXACHLOROETHANE	ND (33)	ug/Kg
INDENO(1,2,3-CD)PYRENE	ND (33)	ug/Kg
ISOPHORONE	ND (33)	ug/Kg
N-NITROSODI-N-PROPYLAMINE	ND (33)	ug/Kg
N-NITROSODIMETHYLAMINE	ND (33)	ug/Kg
N-NITROSODIPHENYLAMINE	ND (33)	ug/Kg
NAPHTHALENE	ND (33)	ug/Kg
NITROBENZENE	ND (33)	ug/Kg
PHENANTHRENE	ND (33)	ug/Kg
PYRENE	ND (33)	ug/Kg
TRICHLOROBENZENE, 1,2,4-	ND (33)	ug/Kg
BERYLLIUM, TOTAL	2 0	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
CADMIUM, TOTAL	ND (2 0)	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
CHROMIUM, TOTAL	180	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
COPPER	4 5	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
QC SPECIAL SCAN	ND (0 05)	mg/Kg
RESULTS ARE REPORTED ON A WET-WEIGHT BASIS		
LEAD, TOTAL	ND (10)	mg/Kg
* AVERAGE OF DUPLICATE RUNS		

 See last page for explanation of symbols

Table A-8. Results of 8/8/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project A3254
Report Date 08-23-85

Client I D	SB-1
ERG Sample No	08/134344
Matrix	SOIL
Date Sampled	07-30-85

Parameter	Result	Units
MERCURY	ND (0.1)	mg/Kg
MOISTURE, PERCENT	18	%
* AVERAGE OF DUPLICATE RUNS		
NICKEL, TOTAL	<10	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
ORTHO PHOSPHATE	24	mg/Kg
PHOSPHORUS, TOTAL	5700	mg/Kg
SELENIUM, TOTAL	ND (2.0)	mg/Kg
HIGHER DETECTION LIMIT DUE TO MATRIX INTERFERENCE		
SILVER	ND (4.0)	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
THALLIUM	0	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
VOLATILE FRACTION (PRIOR POLLS EPA METH 624)		
BENZENE	ND (1)	ug/Kg
BROMODICHLOROMETHANE	ND (1)	ug/Kg
BROMOFORM	ND (1)	ug/Kg
BROMOMETHANE	ND (1)	ug/Kg
CARBON TETRACHLORIDE	ND (1)	ug/Kg
CHLOROBENZENE	ND (1)	ug/Kg
CHLOROETHANE	ND (1)	ug/Kg
CHLOROETHYLVINYLETHER, 2	ND (1)	ug/Kg
CHLOROFORM	ND (1)	ug/Kg
CHLOROMETHANE	ND (1)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (1)	ug/Kg
DIBROMOCHLOROMETHANE	ND (1)	ug/Kg
DICHLOROETHANE, 1,1-	ND (1)	ug/Kg
DICHLOROETHANE, 1,2-	ND (1)	ug/Kg
DICHLOROETHENE, 1,1-	ND (1)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (1)	ug/Kg
ETHYLBENZENE	ND (1)	ug/Kg
METHYLENE CHLORIDE	36	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	ND (1)	ug/Kg
TETRACHLOROETHENE	ND (1)	ug/Kg
TOLUENE	ND (1)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (1)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND (1)	ug/Kg
TRICHLOROETHANE, 1,1,1-	ND (1)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND (1)	ug/Kg
TRICHLOROETHENE	ND (1)	ug/Kg
TRICHLOROFLUOROMETHANE	ND (1)	ug/Kg
VINYL CHLORIDE	ND (1)	ug/Kg
ZINC	48	mg/Kg

 See last page for explanation of symbols

Table A-8. Results of 8/8/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project A3251
Report Date 08-23-85

Client I.D	SB-1
ERG Sample No	08/134344
Matrix	SOIL
Date Sampled	07-30-85

Parameter	Result	Units
* AVERAGE OF DUPLICATE RUNS		

Client I.D	SB-3
ERG Sample No	08/134345
Matrix	SOIL
Date Sampled	08-02-85

Parameter	Result	Units
ACID FRACTION (PRIOR POLLS METH 625)		
CHLOROPHENOL, 2-	ND (33)	ug/Kg
NITROPHENOL, 2-	ND (33)	ug/Kg
PHENOL	ND (33)	ug/Kg
DIMETHYLPHENOL, 2,4-	ND (33)	ug/Kg
DICHLOROPHENOL, 2,4-	ND (33)	ug/Kg
TRICHLOROPHENOL, 2,4,6-	ND (33)	ug/Kg
CHLORO-3-METHYLPHENOL, 4-	ND (33)	ug/Kg
DINITROPHENOL, 2,4-	ND (33)	ug/Kg
METHYL-4,6-DINITROPHENOL, 2-	ND (33)	ug/Kg
PENTACHLOROPHENOL	ND (33)	ug/Kg
NITROPHENOL, 4-	ND (33)	ug/Kg
ANTIMONY	50	mg/Kg
ARSENIC, TOTAL	10	mg/Kg
B/N FRACTION (PRIOR POLLS METH 625)		
ACENAPTHENE	ND (33)	ug/Kg
ACENAPTHYLENE	ND (33)	ug/Kg
ANTHRACENE	ND (33)	ug/Kg
BENZIDINE	ND (33)	ug/Kg
BENZO(A)ANTHRACENE	ND (33)	ug/Kg
BENZO(A)PYRENE	ND (33)	ug/Kg
BENZO(B)FLUORANTHENE	ND (33)	ug/Kg
BENZO(K)FLUORANTHENE	ND (33)	ug/Kg
BENZO(G,H,I)PERYLENE	ND (33)	ug/Kg
BIS(2-CHLOROETHYL)ETHER	ND (33)	ug/Kg
BIS(2-CHLOROETHOXY)METHANE	ND (33)	ug/Kg
BIS(2-CHLOROISOPROPYL)ETHER	ND (33)	ug/Kg
BIS(2-ETHYLHEXYL)PHTHALATE	ND (33)	ug/Kg
BROMOPHENYL PHENYL ETHER, 4-	ND (33)	ug/Kg
BUTYL BENZYL PHTHALATE	ND (33)	ug/Kg
CHLORONAPHTHALENE, 2-	ND (33)	ug/Kg
CHLOROPHENYL PHENYL ETHER, 4-	ND (33)	ug/Kg
CHRYSENE	ND (33)	ug/Kg
DI-N-BUTYLPHTHALATE	ND (33)	ug/Kg
DIBENZO(A,H)ANTHRACENE	ND (33)	ug/Kg
DICHLOROBENZENE, 1,2-	ND (33)	ug/Kg
DICHLOROBENZENE, 1,3-	ND (33)	ug/Kg

 See last page for explanation of symbols

Table A-8. Results of 8/8/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254
Report Date 08-23-85

Client I.D. SB-3
ERG Sample No 08/134345
Matrix: SOIL
Date Sampled: 08-02-85

Parameter	Result	Units
DICHLOROBENZENE, 1,4-	ND (33)	ug/Kg
DICHLOROBENZIDINE, 3,3'-	ND (33)	ug/Kg
DIETHYLPHTHALATE	ND (33)	ug/Kg
DIMETHYLPHTHALATE	ND (33)	ug/Kg
DINITROTOLUENE 2,4-	ND (33)	ug/Kg
DINITROTOLUENE 2,6-	ND (33)	ug/Kg
DIOCTYLPHTHALATE	ND (33)	ug/Kg
DIPHENYLHYDRAZINE 1,2-	ND (33)	ug/Kg
FLUORANTHENE	ND (33)	ug/Kg
FLUORENE	ND (33)	ug/Kg
HEXACHLOROBENZENE	ND (33)	ug/Kg
HEXACHLOROBUTADIENE	ND (33)	ug/Kg
HEXACHLOROCYCLOPENTADIENE	ND (33)	ug/Kg
HEXACHLOROETHANE	ND (33)	ug/Kg
INDENO(1,2,3-CD)PYRENE	ND (33)	ug/Kg
ISOPHORONE	ND (33)	ug/Kg
N-NITROSODI-N-PROPYLAMINE	ND (33)	ug/Kg
N-NITROSODIMETHYLAMINE	ND (33)	ug/Kg
N-NITROSODIPHENYLAMINE	ND (33)	ug/Kg
NAPHTHALENE	ND (33)	ug/Kg
NITROBENZENE	ND (33)	ug/Kg
PHENANTHRENE	ND (33)	ug/Kg
PYRENE	ND (33)	ug/Kg
TRICHLOROBENZENE, 1,2,4-	ND (33)	
BERYLLIUM, TOTAL	2.0	mg/Kg
CADMIUM, TOTAL	ND (2.0)	mg/Kg
CHROMIUM, TOTAL	10	mg/Kg
COPPER	5.9	mg/Kg
QC SPECIAL SCAN	0.071	mg/Kg
RESULTS ARE REPORTED ON A WET-WEIGHT BASIS		
LEAD, TOTAL	ND (10)	mg/Kg
MERCURY	<0.1	mg/Kg
MOISTURE, PERCENT	13	%
NICKEL, TOTAL	<10	mg/Kg
ORTHO PHOSPHATE	120	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
PHOSPHORUS, TOTAL	4500	mg/Kg
SELENIUM, TOTAL	<0.2	mg/Kg
SILVER	ND (4.0)	mg/Kg
THALLIUM	<20	mg/Kg
VOLATILE FRACTION (PRIOR POLLS EPA METH 624)		
BENZENE	ND (1)	ug/Kg
BROMODICHLOROMETHANE	ND (1)	ug/Kg
BROMOFORM	ND (1)	ug/Kg

Page 5 See last page for explanation of symbols

Table A-8. Results of 8/8/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254
Report Date: 08-23-85

Client I.D.: SB-3
ERG Sample No.: 08/134345
Matrix: SOIL
Date Sampled: 08-02-85

Parameter	Result	Units
BROMOMETHANE	ND (1)	ug/Kg
CARBON TETRACHLORIDE	ND (1)	ug/Kg
CHLOROBENZENE	ND (1)	ug/Kg
CHLOROETHANE	ND (1)	ug/Kg
CHLOROETHYLVINYLETHER, 2	ND (1)	ug/Kg
CHLOROFORM	ND (1)	ug/Kg
CHLOROMETHANE	ND (1)	ug/Kg
CIS-1, 3-DICHLOROPROPENE	ND (1)	ug/Kg
DIBROMOCHLOROMETHANE	ND (1)	ug/Kg
DICHLOROETHANE, 1, 1-	ND (1)	ug/Kg
DICHLOROETHANE, 1, 2-	ND (1)	ug/Kg
DICHLOROETHENE, 1, 1-	ND (1)	ug/Kg
DICHLOROPROPANE, 1, 2-	ND (1)	ug/Kg
ETHYLBENZENE	ND (1)	ug/Kg
METHYLENE CHLORIDE	(1)	ug/Kg
TETRACHLOROETHANE, 1, 1, 2, 2-	ND (1)	ug/Kg
TETRACHLOROETHENE	ND (1)	ug/Kg
TOLUENE	ND (1)	ug/Kg
TRANS-1, 3-DICHLOROPROPENE	ND (1)	ug/Kg
TRANS-1, 2-DICHLOROETHYLENE	ND (1)	ug/Kg
TRICHLOROETHANE, 1, 1, 1-	ND (1)	ug/Kg
TRICHLOROETHANE, 1, 1, 2-	ND (1)	ug/Kg
TRICHLOROETHENE	1	ug/Kg
TRICHLOROFLUOROMETHANE	ND (1)	ug/Kg
VINYL CHLORIDE	ND (1)	ug/Kg
ZINC	[illegible]	mg/Kg

Client I.D.: SB-4
ERG Sample No.: 08/134346
Matrix: SOIL
Date Sampled: 08-02-85

Parameter	Result	Units
ACID FRACTION (PRIOR POLLS. METH 625)		
CHLOROPHENOL, 2-	ND (33)	ug/Kg
NITROPHENOL, 2-	ND (33)	ug/Kg
PHENOL	ND (33)	ug/Kg
DIMETHYLPHENOL, 2, 4-	ND (33)	ug/Kg
DICHLOROPHENOL, 2, 4-	ND (33)	ug/Kg
TRICHLOROPHENOL, 2, 4, 6-	ND (33)	ug/Kg
CHLORO-3-METHYLPHENOL, 4-	ND (33)	ug/Kg
DINITROPHENOL, 2, 4-	ND (33)	ug/Kg
METHYL-4, 6-DINITROPHENOL, 2-	ND (33)	ug/Kg
PENTACHLOROPHENOL	ND (33)	ug/Kg
NITROPHENOL, 4-	ND (33)	ug/Kg
ANTIMONY	ND (50)	mg/Kg

 See last page for explanation of symbols.

Table A-8. Results of 8/8/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254
Report Date: 08-23-85

Client I.D.: SB-4
ERG Sample No.: 08/134346
Matrix: SOIL
Date Sampled: 08-02-85

Parameter	Result	Units
ARSENIC, TOTAL	4.9	mg/Kg
B/N FRACTION (PRIOR. POLLS METH. 625)		
ACENAPTHENE	ND (33)	ug/Kg
ACENAPTHYLENE	ND (33)	ug/Kg
ANTHRACENE	ND (33)	ug/Kg
BENZIDINE	ND (33)	ug/Kg
BENZO(A)ANTHRACENE	ND (33)	ug/Kg
BENZO(A)PYRENE	ND (33)	ug/Kg
BENZO(B)FLUORANTHENE	ND (33)	ug/Kg
BENZO(K)FLUORANTHENE	ND (33)	ug/Kg
BENZO(G,H,I)PERYLENE	ND (33)	ug/Kg
BIS(2-CHLOROETHYL)ETHER	ND (33)	ug/Kg
BIS(2-CHLORETHOXY)METHANE	ND (33)	ug/Kg
BIS(2-CHLOROISOPROPYL)ETHER	ND (33)	ug/Kg
BIS(2-ETHYLHEXYL)PHTHALATE	1,200	ug/Kg
BROMOPHENYL PHENYL ETHER, 4-	ND (33)	ug/Kg
BUTYL BENZYL PHTHALATE	ND (33)	ug/Kg
CHLORONAPHTHALENE, 2-	ND (33)	ug/Kg
CHLOROPHENYL PHENYL ETHER, 4-	ND (33)	ug/Kg
CHRYSENE	ND (33)	ug/Kg
DI-N-BUTYLPHTHALATE	ND (33)	ug/Kg
DIBENZO(A,H)ANTHRACENE	ND (33)	ug/Kg
DICHLOROBENZENE, 1,2-	ND (33)	ug/Kg
DICHLOROBENZENE, 1,3-	ND (33)	ug/Kg
DICHLOROBENZENE, 1,4-	ND (33)	ug/Kg
DICHLOROBENZIDINE, 3,3'-	ND (33)	ug/Kg
DIETHYLPHTHALATE	ND (33)	ug/Kg
DIMETHYLPHTHALATE	ND (33)	ug/Kg
DINITROTOLUENE 2,4-	ND (33)	ug/Kg
DINITROTOLUENE 2,6-	ND (33)	ug/Kg
DIOCTYLPHTHALATE	ND (33)	ug/Kg
DIPHENYLHYDRAZINE 1,2-	ND (33)	ug/Kg
FLUORANTHENE	ND (33)	ug/Kg
FLUORENE	ND (33)	ug/Kg
HEXACHLOROBENZENE	ND (33)	ug/Kg
HEXACHLOROBUTADIENE	ND (33)	ug/Kg
HEXACHLOROCYCLOPENTADIENE	ND (33)	ug/Kg
HEXACHLOROETHANE	ND (33)	ug/Kg
INDENO(1,2,3-CD)PYRENE	ND (33)	ug/Kg
ISOPHORONE	ND (33)	ug/Kg
N-NITROSODI-N-PROPYLAMINE	ND (33)	ug/Kg
N-NITROSODIMETHYLAMINE	ND (33)	ug/Kg
N-NITROSODIPHENYLAMINE	ND (33)	ug/Kg
NAPHTHALENE	ND (33)	ug/Kg
NITROBENZENE	ND (33)	ug/Kg
PHENANTHRENE	ND (33)	ug/Kg

 See last page for explanation of symbols.

Table A-8. Results of 8/8/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project. A3254
Report Date: 08-23-85

Client I.D.: SB-4
ERG Sample No.: 08/134346
Matrix: SOIL
Date Sampled: 08-02-85

Parameter	Result	Units
PYRENE	ND (33)	ug/Kg
TRICHLOROBENZENE, 1,2,4-	ND (33)	
BERYLLIUM, TOTAL	ND (2.0)	mg/Kg
CADMIUM, TOTAL	ND (2.0)	mg/Kg
CHROMIUM, TOTAL	880	mg/Kg
COPPER	15	mg/Kg
GC SPECIAL SCAN	ND (0.05)	mg/Kg
RESULTS ARE REPORTED ON A WET-WEIGHT BASIS.		
LEAD, TOTAL	ND (10)	mg/Kg
MERCURY	0.21	mg/Kg
MOISTURE, PERCENT	10	%
NICKEL, TOTAL	13	mg/Kg
ORTHO. PHOSPHATE	0.4	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
PHOSPHORUS, TOTAL	70	mg/Kg
SELENIUM, TOTAL	ND (2)	mg/Kg
HIGHER DETECTION LIMIT DUE TO MATRIX INTERFERENCE. * AVERAGE OF DUPLICATE RUNS		
SILVER	ND (4.0)	mg/Kg
THALLIUM	220	mg/Kg
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (1)	ug/Kg
BROMODICHLOROMETHANE	ND (1)	ug/Kg
BROMOFORM	ND (1)	ug/Kg
BROMOMETHANE	ND (1)	ug/Kg
CARBON TETRACHLORIDE	ND (1)	ug/Kg
CHLOROBENZENE	ND (1)	ug/Kg
CHLOROETHANE	ND (1)	ug/Kg
CHLOROETHYLVINYLETHER, 2	ND (1)	ug/Kg
CHLOROFORM	ND (1)	ug/Kg
CHLOROMETHANE	ND (1)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (1)	ug/Kg
DIBROMOCHLOROMETHANE	ND (1)	ug/Kg
DICHLOROETHANE, 1,1-	ND (1)	ug/Kg
DICHLOROETHANE, 1,2-	ND (1)	ug/Kg
DICHLOROETHENE, 1,1-	ND (1)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (1)	ug/Kg
ETHYLBENZENE	ND (1)	ug/Kg
METHYLENE CHLORIDE	39	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	ND (1)	ug/Kg
TETRACHLOROETHENE	ND (1)	ug/Kg
TOLUENE	ND (1)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (1)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND (1)	ug/Kg

 See last page for explanation of symbols.

Table A-8. Results of 8/8/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254
Report Date: 08-23-85

Client I.D.: SB-4
ERG Sample No.: 08/134346
Matrix: SOIL
Date Sampled: 08-02-85

Parameter	Result	Units
TRICHLOROETHANE, 1,1,1-	ND (1)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND (1)	ug/Kg
TRICHLOROETHENE	ND (1)	ug/Kg
TRICHLOROFLUOROMETHANE	ND (1)	ug/Kg
VINYL CHLORIDE	ND (1)	ug/Kg
ZINC	23	mg/Kg

Client I.D.: SB-2
ERG Sample No.: 08/134442
Matrix: SOIL
Date Sampled: 08-02-85

Parameter	Result	Units
ACID FRACTION (PRIOR. POLLS. METH 625)		
CHLOROPHENOL, 2-	ND (33)	ug/Kg
NITROPHENOL, 2-	ND (33)	ug/Kg
PHENOL	ND (33)	ug/Kg
DIMETHYLPHENOL, 2,4-	ND (33)	ug/Kg
DICHLOROPHENOL, 2,4-	ND (33)	ug/Kg
TRICHLOROPHENOL, 2,4,6-	ND (33)	ug/Kg
CHLORO-3-METHYLPHENOL, 4-	ND (33)	ug/Kg
DINITROPHENOL, 2,4-	ND (33)	ug/Kg
METHYL-4,6-DINITROPHENOL, 2-	ND (33)	ug/Kg
PENTACHLOROPHENOL	ND (33)	ug/Kg
NITROPHENOL, 4-	ND (33)	ug/Kg
ANTIMONY	ND (50)	mg/Kg
ARSENIC, TOTAL	1.1	mg/Kg
* AVERAGE OF DUPLICATE RUNS		
B/N FRACTION (PRIOR. POLLS METH. 625)		
ACENAPTHENE	ND (33)	ug/Kg
ACENAPTHYLENE	ND (33)	ug/Kg
ANTHRACENE	ND (33)	ug/Kg
BENZIDINE	ND (33)	ug/Kg
BENZO(A)ANTHRACENE	ND (33)	ug/Kg
BENZO(A)PYRENE	ND (33)	ug/Kg
BENZO(B)FLUORANTHENE	ND (33)	ug/Kg
BENZO(K)FLUORANTHENE	ND (33)	ug/Kg
BENZO(Q,H,I)PERYLENE	ND (33)	ug/Kg
BIS(2-CHLOROETHYL)ETHER	ND (33)	ug/Kg
BIS(2-CHLORETHOXY)METHANE	ND (33)	ug/Kg
BIS(2-CHLOROISOPROPYL)ETHER	ND (33)	ug/Kg
BIS(2-ETHYLHEXYL)PHTHALATE	490	ug/Kg
BROMOPHENYL PHENYL ETHER, 4-	ND (33)	ug/Kg
BUTYL BENZYL PHTHALATE	ND (33)	ug/Kg
CHLORONAPHTHALENE, 2-	ND (33)	ug/Kg
CHLOROPHENYL PHENYL ETHER, 4-	ND (33)	ug/Kg

 See last page for explanation of symbols.

Table A-8. Results of 8/8/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254
Report Date: 08-23-85

Client I.D.: SB-2
ERG Sample No.: 08/134442
Matrix: SOIL
Date Sampled: 08-02-85

Parameter	Result	Units
CHRYSENE	ND (33)	ug/Kg
DI-N-BUTYLPHTHALATE	ND (33)	ug/Kg
DIBENZO(A,H)ANTHRACENE	ND (33)	ug/Kg
DICHLOROBENZENE, 1,2-	ND (33)	ug/Kg
DICHLOROBENZENE, 1,3-	ND (33)	ug/Kg
DICHLOROBENZENE, 1,4-	ND (33)	ug/Kg
DICHLOROBENZIDINE, 3,3'-	ND (33)	ug/Kg
DIETHYLPHTHALATE	ND (33)	ug/Kg
DIMETHYLPHTHALATE	ND (33)	ug/Kg
DINITROTOLUENE 2,4-	ND (33)	ug/Kg
DINITROTOLUENE 2,6-	ND (33)	ug/Kg
DIOCTYLPHTHALATE	ND (33)	ug/Kg
DIPHENYLHYDRAZINE 1,2-	ND (33)	ug/Kg
FLUORANTHENE	ND (33)	ug/Kg
FLUORENE	ND (33)	ug/Kg
HEXACHLOROBENZENE	ND (33)	ug/Kg
HEXACHLOROBUTADIENE	ND (33)	ug/Kg
HEXACHLOROCYCLOPENTADIENE	ND (33)	ug/Kg
HEXACHLOROETHANE	ND (33)	ug/Kg
INDENO(1,2,3-CD)PYRENE	ND (33)	ug/Kg
ISOPHORONE	ND (33)	ug/Kg
N-NITROSODI-N-PROPYLAMINE	ND (33)	ug/Kg
N-NITROSODIMETHYLAMINE	ND (33)	ug/Kg
N-NITROSODIPHENYLAMINE	ND (33)	ug/Kg
NAPHTHALENE	ND (33)	ug/Kg
NITROBENZENE	ND (33)	ug/Kg
PHENANTHRENE	ND (33)	ug/Kg
PYRENE	ND (33)	ug/Kg
TRICHLOROBENZENE, 1,2,4-	ND (33)	ug/Kg
BERYLLIUM, TOTAL	<2.0	mg/Kg
CADMIUM, TOTAL	0.08	mg/Kg
CHROMIUM, TOTAL	150	mg/Kg
COPPER	<4.0	mg/Kg
GC SPECIAL SCAN	ND (0.05)	mg/Kg
* AVERAGE OF DUPLICATE RUNS RESULTS ARE REPORTED ON A WET-WEIGHT BASIS.		
LEAD, TOTAL	ND (10)	mg/Kg
MERCURY	<0.1	mg/Kg
NICKEL, TOTAL	14	mg/Kg
ORTHO. PHOSPHATE	34	mg/Kg
PHOSPHORUS, TOTAL	3500	mg/Kg
SELENIUM, TOTAL	ND (2)	mg/Kg
HIGHER DETECTION LIMIT DUE TO MATRIX INTERFERENCE. * AVERAGE OF DUPLICATE RUNS		
SILVER	4.0	mg/Kg

Page 10 See last page for explanation of symbols.

Table A-8. Results of 8/8/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3254
Report Date: 08-23-85

Client I.D.: SB-2
ERG Sample No.: 08/134442
Matrix: SOIL
Date Sampled: 08-02-85

Parameter	Result	Units
THALLIUM	<20	mg/Kg
VOLATILE FRACTION (PRIOR. POLLS. EPA METH 624)		
BENZENE	ND (1)	ug/Kg
BROMODICHLOROMETHANE	ND (1)	ug/Kg
BROMOFORM	ND (1)	ug/Kg
BROMOMETHANE	ND (1)	ug/Kg
CARBON TETRACHLORIDE	ND (1)	ug/Kg
CHLOROBENZENE	ND (1)	ug/Kg
CHLOROETHANE	ND (1)	ug/Kg
CHLOROETHYLVINYLETHER, 2	ND (1)	ug/Kg
CHLOROFORM	ND (1)	ug/Kg
CHLOROMETHANE	ND (1)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (1)	ug/Kg
DIBROMOCHLOROMETHANE	ND (1)	ug/Kg
DICHLOROETHANE, 1,1-	ND (1)	ug/Kg
DICHLOROETHANE, 1,2-	ND (1)	ug/Kg
DICHLOROETHENE, 1,1-	ND (1)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (1)	ug/Kg
ETHYLBENZENE	ND (1)	ug/Kg
METHYLENE CHLORIDE	34	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	ND (1)	ug/Kg
TETRACHLOROETHENE	ND (1)	ug/Kg
TOLUENE	ND (1)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (1)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND (1)	ug/Kg
TRICHLOROETHANE, 1,1,1-	ND (1)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND (1)	ug/Kg
TRICHLOROETHENE	ND (1)	ug/Kg
TRICHLOROFLUOROMETHANE	ND (1)	ug/Kg
VINYL CHLORIDE	ND (1)	ug/Kg
ZINC	60	mg/Kg

SD-Sample damaged
FR-See field report for result
SR-See attached report
NA-Result not applicable to test

ND-Nondetected, Detection limit in ()
<-Positive result at an unquantifiable concentration below indicated level

Thank you for your business.

Table A-8. Results of 8/8/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.
117 N. FIRST
ANN ARBOR, MICHIGAN 48104 (313) 662-3104

Project A3693
Report Date 02-05-86

Client P.O. CONTRACT
Report: 16629

Samples Recvd 12-06-85
Refer Questions To
ROBYN WOOLEY

Client:
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
8400 WESTPARK DRIVE
MC LEAN, VA 22102

Approved

***
Residual Samples Will Be Held
TWO WEEKS
***

Client I.D. SB-5 (20-22)
ERG Sample No 12/141893
Matrix: SEDIMENT

Parameter	Result	Units
ANTIMONY	25	mg/Kg
ARSENIC, TOTAL	4 8	mg/Kg
BERYLLIUM, TOTAL	2	mg/Kg
CADMIUM, TOTAL	2	mg/Kg
ORGANIC CARBON, TOTAL	20	mg/Kg
CHROMIUM, TOTAL	57	mg/Kg
COPPER	16	mg/Kg
GC SPECIAL SCAN	ND (50)	mg/Kg
CUSTOM INORGANIC ANALYSIS	64 00	mg/Kg
Comments: THIS IS FOR TOTAL INORGANIC CARBON AVERAGE OF DUPLICATE RUNS		
LEAD, TOTAL	28	mg/Kg
MERCURY	0 04	mg/Kg
NICKEL, TOTAL	8 2	mg/Kg
OIL AND GREASE	00	mg/Kg
AVERAGE OF DUPLICATE RUNS		
ORTHO PHOSPHATE	25	mg/Kg
PHOSPHORUS, TOTAL	30	mg/Kg
SELENIUM, TOTAL	0 2	mg/Kg
SILVER	4 0	mg/Kg
THALLIUM	0	mg/Kg
VOLATILE FRACTION PRIOR POLLS EPA METH 624)		
BENZENE	ND (1)	ug/Kg
BROMODICHLOROMETHANE	ND (1)	ug/Kg
BROMOFORM	ND (1)	ug/Kg
BROMOMETHANE	ND (1)	ug/Kg
CARBON TETRACHLORIDE	ND (1)	ug/Kg
CHLOROBENZENE	ND (1)	ug/Kg
CHLOROETHANE	ND (1)	ug/Kg
CHLOROETHYLVINYL ETHER 2	ND (1)	ug/Kg
CHLOROFORM	ND (1)	ug/Kg
CHLOROMETHANE	ND (1)	ug/Kg
DIBROMOCHLOROMETHANE	ND (1)	ug/Kg
DICHLOROBROMOMETHANE	ND (1)	ug/Kg

Table 1-3 Results of 12/5/85 Soil Sampling

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project A3693
Report Date 02-05-86

Client I D	SB-7 (20-22)
ERG Sample No	12/141895
Matrix	SEDIMENT

Parameter	Result	Units
OIL AND GREASE	1300	mg/Kg
ORTHO PHOSPHATE	<3	mg/Kg
PHOSPHORUS, TOTAL	650	mg/Kg
AVERAGE OF DUPLICATE RUNS		
SELENIUM, TOTAL	ND (0.1)	mg/Kg
SILVER	<4.0	mg/Kg
THALLIUM	<10	mg/Kg
VOLATILE FRACTION (PRIOR POLLS EPA METH 624)		
BENZENE	ND (10)	ug/Kg
BROMODICHLOROMETHANE	ND (10)	ug/Kg
BROMOFORM	ND (10)	ug/Kg
BROMOMETHANE	ND (10)	ug/Kg
CARBON TETRACHLORIDE	ND (10)	ug/Kg
CHLOROBENZENE	ND (10)	ug/Kg
CHLOROETHANE	ND (10)	ug/Kg
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/Kg
CHLOROFORM	ND (10)	ug/Kg
CHLOROMETHANE	ND (10)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (10)	ug/Kg
DIBROMOCHLOROMETHANE	ND (10)	ug/Kg
DICHLOROETHANE, 1,1-	ND (10)	ug/Kg
DICHLOROETHANE, 1,2-	ND (10)	ug/Kg
DICHLOROETHENE, 1,1-	ND (10)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (10)	ug/Kg
ETHYLBENZENE	ND (10)	ug/Kg
METHYLENE CHLORIDE	330	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	ND (10)	ug/Kg
TETRACHLOROETHENE	ND (10)	ug/Kg
TOLUENE	ND (10)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (10)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND (10)	ug/Kg
TRICHLOROETHANE, 1,1,1-	ND (10)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND (10)	ug/Kg
TRICHLOROETHENE	ND (10)	ug/Kg
TRICHLOROFLUOROMETHANE	ND (10)	ug/Kg
VINYL CHLORIDE	ND (10)	ug/Kg
ZINC	23	mg/Kg

Client I D	SB-7 (25-27)
ERG Sample No	12/141896
Matrix	SEDIMENT

Parameter	Result	Units
ANTIMONY	<25	mg/Kg
ARSENIC, TOTAL	0.39	mg/Kg
BERYLLIUM, TOTAL	<2	mg/Kg

 See last page for explanation of symbols

Table A-9. Results of 12/5/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project A3693
Report Date 02-05-86

Client I.D. SB-7 (25-27)
ERG Sample No I2/141896
Matrix SEDIMENT

Parameter	Result	Units
CADMIUM, TOTAL	2	mg/Kg
ORGANIC CARBON, TOTAL	ND (1)	mg/Kg
CHROMIUM, TOTAL	130	mg/Kg
COPPER	8.0	mg/Kg
GC SPECIAL SCAN	ND (50)	mg/Kg
CUSTOM INORGANIC ANALYSIS	21000	mg/Kg
Comments THIS IS FOR TOTAL INORGANIC CARBON		
LEAD, TOTAL	13	mg/Kg
MERCURY	ND (0.04)	mg/Kg
NICKEL, TOTAL	5.5	mg/Kg
OIL AND GREASE	800	mg/Kg
ORTHO PHOSPHATE	3	mg/Kg
PHOSPHORUS, TOTAL	5400	mg/Kg
SELENIUM, TOTAL	ND (0.1)	mg/Kg
SILVER	4.0	mg/Kg
THALLIUM	<10	mg/Kg
VOLATILE FRACTION (PRIOR POLLS EPA METH 624)		
BENZENE	ND (1)	ug/Kg
BROMODICHLOROMETHANE	ND (1)	ug/Kg
BROMOFORM	ND (1)	ug/Kg
BROMOMETHANE	ND (1)	ug/Kg
CARBON TETRACHLORIDE	ND (1)	ug/Kg
CHLOROBENZENE	ND (1)	ug/Kg
CHLOROETHANE	ND (1)	ug/Kg
CHLOROETHYLVINYLETHER, 2	ND (1)	ug/Kg
CHLOROFORM	ND (1)	ug/Kg
CHLOROMETHANE	ND (1)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (1)	ug/Kg
DIBROMOCHLOROMETHANE	ND (1)	ug/Kg
DICHLOROETHANE, 1,1-	ND (1)	ug/Kg
DICHLOROETHANE, 1,2-	ND (1)	ug/Kg
DICHLOROETHENE, 1,1-	ND (1)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (1)	ug/Kg
ETHYLBENZENE	ND (1)	ug/Kg
METHYLENE CHLORIDE	ND (1)	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	ND (1)	ug/Kg
TETRACHLOROETHENE	ND (1)	ug/Kg
TOLUENE	ND (1)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (1)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND (1)	ug/Kg
TRICHLOROETHANE, 1,1,1-	ND (1)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND (1)	ug/Kg
TRICHLOROETHENE	ND (1)	ug/Kg
TRICHLOROFLUOROMETHANE	ND (1)	ug/Kg
VINYL CHLORIDE	ND (1)	ug/Kg
ZINC	31	mg/Kg

 See last page for explanation of symbols

Table A-9. Results of 12/5/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A3693
Report Date 02-05-86

Client I D	SB-8 (21-23)	
ERG Sample No	12/141897	
Matrix	SEDIMENT	

Parameter	Result	Units
ANTIMONY	<25	mg/Kg
AVERAGE OF DUPLICATE RUNS		
ARSENIC, TOTAL	4 9	mg/kg
BERYLLIUM, TOTAL	<2	mg/kg
AVERAGE OF DUPLICATE RUNS		
CADMIUM, TOTAL	<2	mg/kg
AVERAGE OF DUPLICATE RUNS		
ORGANIC CARBON, TOTAL	19000	mg/Kg
CHROMIUM, TOTAL	5900	mg/Kg
AVERAGE OF DUPLICATE RUNS		
COPPER	12	mg/kg
AVERAGE OF DUPLICATE RUNS		
GC SPECIAL SCAN	130	mg/Kg
AVERAGE OF DUPLICATE RUNS		
CUSTOM INORGANIC ANALYSIS	5[illegible]00	mg/Kg
Comments: THIS IS FOR TOTAL INORGANIC CARBON		
LEAD, TOTAL	26	mg/Kg
AVERAGE OF DUPLICATE RUNS		
MERCURY	ND (0 04)	mg/kg
AVERAGE OF DUPLICATE RUNS		
NICKEL, TOTAL	12	mg/Kg
AVERAGE OF DUPLICATE RUNS		
OIL AND GREASE	00	mg/Kg
ORTHO PHOSPHATE	3	mg/Kg
PHOSPHORUS, TOTAL	310	mg/Kg
SELENIUM, TOTAL	ND (0 1)	mg/Kg
SILVER	5 2	mg/Kg
AVERAGE OF DUPLICATE RUNS		
THALLIUM	10	mg/Kg
AVERAGE OF DUPLICATE RUNS		
VOLATILE FRACTION (PRIOR POLLS EPA METH 624)		
BENZENE	ND (10)	ug/Kg
BROMODICHLOROMETHANE	ND (10)	ug/Kg
BROMOFORM	ND (10)	ug/Kg
BROMOMETHANE	ND (10)	ug/Kg
CARBON TETRACHLORIDE	ND (10)	ug/Kg
CHLOROBENZENE	ND (10)	ug/Kg
CHLOROETHANE	ND (10)	ug/Kg
CHLOROETHYLVINYLETHER, 2	ND (10)	ug/Kg
CHLOROFORM	ND (10)	ug/Kg

 See last page for explanation of symbols

Table A-9. Results of 12/5/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project A3693
Report Date 02-05-86

Client I.D. SB-8 (21-23)
ERG Sample No 12/141897
Matrix SEDIMENT

Parameter	Result	Units
CHLOROMETHANE	ND (10)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (10)	ug/Kg
DIBROMOCHLOROMETHANE	ND (10)	ug/Kg
DICHLOROETHANE, 1,1-	ND (10)	ug/Kg
DICHLOROETHANE, 1,2-	ND (10)	ug/Kg
DICHLOROETHENE, 1,1-	ND (10)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (10)	ug/Kg
ETHYLBENZENE	ND (10)	ug/Kg
METHYLENE CHLORIDE	30	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	ND (10)	ug/Kg
TETRACHLOROETHENE	ND (10)	ug/Kg
TOLUENE	ND (10)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (10)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND 10)	ug/Kg
TRICHLOROETHANE, 1,1,1-	ND 10)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND 10)	ug/Kg
TRICHLOROETHENE	ND 10)	ug/Kg
TRICHLOROFLUOROMETHANE	ND 10)	ug/Kg
VINYL CHLORIDE	ND (10)	ug/Kg
ZINC	20	mg/Kg

AVERAGE OF DUPLICATE RUNS

Client I.D. P-1
ERG Sample No 12/141898
Matrix NATURAL WATER

Parameter	Result	Units
ANTIMONY	<0 12	mg/L

AVERAGE OF DUPLICATE RUNS

ARSENIC, TOTAL	<0 001	mg/L
BERYLLIUM, TOTAL	ND (0 005)	mg/L

AVERAGE OF DUPLICATE RUNS

CADMIUM, TOTAL	ND (0 01)	mg/L

AVERAGE OF DUPLICATE RUNS

ORGANIC CARBON, TOTAL	3	mg/L
CHROMIUM, TOTAL	<0 02	mg/L

AVERAGE OF DUPLICATE RUNS

COPPER	0 21	mg/L

AVERAGE OF DUPLICATE RUNS

QC SPECIAL SCAN	ND (0 05)	mg/L
LEAD, TOTAL	<0 05	mg/L

AVERAGE OF DUPLICATE RUNS

 See last page for explanation of symbols.

Table A-9. Results of 12/5/85 Soil Sampling (Continued)

ANALYTICAL REPORT

Project 44002
Report Date 02-07-86

ENVIRONMENTAL RESEARCH GROUP, INC.
117 N. FIRST
ANN ARBOR, MICHIGAN 48104 (313) 662-3184

Client P O 16-860001-88
Report 17249

Samples Recvd 02-21-86
Refer Questions To
ROBYN WOOLEY

Client
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
8400 WESTPARK DRIVE
MC LEAN, VA 22102

Approved

***
Residual Samples Will Be Held
TWO WEEKS
***

Client I D SB-9
ERG Sample No 02/146602
Matrix SOIL

Parameter	Result	Units
PURGABLE AROMATICS		
BENZENE	(2 0)	ug/Kg
1,2-DICHLOROBENZENE	(4 0)	ug/Kg
1,3-DICHLOROBENZENE	(4 0)	ug/Kg
1,4-DICHLOROBENZENE	(3 0)	ug/Kg
ETHYLBENZENE	(2 0)	ug/Kg
TOLUENE	(2 0)	ug/Kg
CHLOROBENZENE	ND (2 0)	ug/Kg
PURGABLES, 601		
CHLOROMETHANE	(0 8)	ug/Kg
BROMOMETHANE	ND (1 8)	ug/Kg
DICHLORODIFLUOROMETHANE	ND (8 1)	ug/Kg
VINYL CHLORIDE	(1 8)	ug/Kg
CHLOROETHANE	(5 2)	ug/Kg
METHYLENE CHLORIDE	(2 5)	ug/Kg
TRICHLOROFLUOROMETHANE	(5 0)	ug/Kg
DICHLOROETHYLENE, 1,1-	(1 3)	ug/Kg
DICHLOROETHANE, 1,1-	(0 7)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	(1 0)	ug/Kg
CHLOROFORM	(0 5)	ug/Kg
DICHLOROETHANE, 1,2-	(0 3)	ug/Kg
TRICHLOROETHANE, 1,1,1-	0 78	ug/Kg
CARBON TETRACHLORIDE	(1 2)	ug/Kg
BROMODICHLOROMETHANE	(1 0)	ug/Kg
DICHLOROPROPANE, 1,2-	(0 4)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	(3 4)	ug/Kg
TRICHLOROETHYLENE	(1 2)	ug/Kg
DIBROMOCHLOROMETHANE	(0 9)	ug/Kg
TRICHLOROETHANE, 1,1,2-	(0 2)	ug/Kg
CIS-1,3-DICHLOROPROPENE	(2 0)	ug/Kg
CHLOROETHYLVINYL ETHER, 2-	(1 3)	ug/Kg
BROMOFORM	(2 0)	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	(0 3)	ug/Kg
TETRACHLOROETHYLENE	(0 3)	ug/Kg
CHLOROBENZENE	(2 5)	ug/Kg

 See last page for explanation of symbols

Table A-10. Results of 2/20/85 Soil Sampling

Client I.D SB-9
ERG Sample No 02/146602
Matrix SOIL

Parameter	Result	Units
DICHLOROBENZENE, 1,3-	ND (3.2)	ug/Kg
DICHLOROBENZENE, 1,2-	ND (1.5)	ug/Kg
DICHLOROBENZENE, 1,4-	ND (2.4)	ug/Kg

Client I.D SB-10
ERG Sample No 02/146603
Matrix SOIL

Parameter	Result	Units
PURGABLE AROMATICS		
BENZENE	ND (2.0)	ug/Kg
1,2-DICHLOROBENZENE	ND (4.0)	ug/Kg
1,3-DICHLOROBENZENE	ND (4.0)	ug/Kg
1,4-DICHLOROBENZENE	ND (3.0)	ug/Kg
ETHYLBENZENE	ND (2.0)	ug/Kg
TOLUENE	2.2	ug/Kg
CHLOROBENZENE	ND (2.0)	ug/Kg
PURGABLES, 601		
CHLOROMETHANE	ND (0.8)	ug/Kg
BROMOMETHANE	ND (11.8)	ug/Kg
DICHLORODIFLUOROMETHANE	ND (18.1)	ug/Kg
VINYL CHLORIDE	ND (1.8)	ug/Kg
CHLOROETHANE	ND (5.2)	ug/Kg
METHYLENE CHLORIDE	ND (2.5)	ug/Kg
TRICHLOROFLUOROMETHANE	ND (5.0)	ug/Kg
DICHLOROETHYLENE, 1,1-	ND (1.3)	ug/Kg
DICHLOROETHANE, 1,1-	ND (0.7)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND (1.0)	ug/Kg
CHLOROFORM	ND (0.5)	ug/Kg
DICHLOROETHANE, 1,2-	ND (0.3)	ug/Kg
TRICHLOROETHANE, 1,1,1-	0.69	ug/Kg
CARBON TETRACHLORIDE	ND (1.2)	ug/Kg
BROMODICHLOROMETHANE	ND (1.0)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (0.4)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (3.4)	ug/Kg
TRICHLOROETHYLENE	ND (1.2)	ug/Kg
DIBROMOCHLOROMETHANE	ND (0.9)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND (0.2)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (2.0)	ug/Kg
CHLOROETHYLVINYL ETHER, 2-	ND (1.3)	ug/Kg
BROMOFORM	ND (2.0)	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	*	
TETRACHLOROETHYLENE	0.43*	ug/Kg
CHLOROBENZENE	ND (2.5)	ug/Kg
DICHLOROBENZENE, 1,3-	ND (3.2)	ug/Kg
DICHLOROBENZENE, 1,2-	ND (1.5)	ug/Kg
DICHLOROBENZENE, 1,4-	ND (2.4)	ug/Kg

 See last page for explanation of symbols

Table A-10. Results of 2/20/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project A4003
Report Date 03-07-86

Client I.D. SB-10
ERG Sample No 02/146603
Matrix SOIL

Parameter	Result	Units
Comments: 1,1,2,2-TETRACHLOROETHANE AND TETRACHLOROETHYLENE COELUTE. VALUE REPORTED COULD REPRESENT A POSSIBLE COMBINATION OF THE TWO COMPOUNDS. TETRACHLOROETHYLENE WAS USED TO CALCULATE RESULTS.		

Client I.D. SB-11A
ERG Sample No 02/146604
Matrix SOIL

Parameter	Result	Units
PURGABLE AROMATICS		
BENZENE	ND (2.0)	ug/Kg
1,2-DICHLOROBENZENE	ND (4.0)	ug/Kg
1,3-DICHLOROBENZENE	ND (4.0)	ug/Kg
1,4-DICHLOROBENZENE	ND (3.0)	ug/Kg
ETHYLBENZENE	ND (2.0)	ug/Kg
TOLUENE	ND (2.0)	ug/Kg
CHLOROBENZENE	ND (2.0)	ug/Kg
PURGABLES, 601		
CHLOROMETHANE	ND (0.8)	ug/Kg
BROMOMETHANE	ND (1.8)	ug/Kg
DICHLORODIFLUOROMETHANE	ND (8.1)	ug/Kg
VINYL CHLORIDE	ND (1.8)	ug/Kg
CHLOROETHANE	ND (5.2)	ug/Kg
METHYLENE CHLORIDE	ND (2.5)	ug/Kg
TRICHLOROFLUOROMETHANE	ND (5.0)	ug/Kg
DICHLOROETHYLENE, 1,1-	ND (1.3)	ug/Kg
DICHLOROETHANE, 1,1-	ND (0.7)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND (1.0)	ug/Kg
CHLOROFORM	ND (0.5)	ug/Kg
DICHLOROETHANE, 1,2-	(0.48)	ug/Kg
TRICHLOROETHANE, 1,1,1-	ND (0.3)	ug/Kg
CARBON TETRACHLORIDE	ND (1.2)	ug/Kg
BROMODICHLOROMETHANE	ND (1.0)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (0.4)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (3.4)	ug/Kg
TRICHLOROETHYLENE	ND (1.2)	ug/Kg
DIBROMOCHLOROMETHANE	ND (0.9)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND (0.2)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (2.0)	ug/Kg
CHLOROETHYLVINYL ETHER, 2-	ND (1.3)	ug/Kg
BROMOFORM	ND (2.0)	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	ND (0.3)	ug/Kg
TETRACHLOROETHYLENE	ND (0.3)	ug/Kg
CHLOROBENZENE	ND (2.5)	ug/Kg

 See last page for explanation of symbols.

Table A-10. Results of 2/20/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4003
Report Date: 03-07-86

Client I.D. SB-11A
ERG Sample No. 02/146604
Matrix: SOIL

Parameter	Result	Units
DICHLOROBENZENE, 1,3-	ND (3.2)	ug/Kg
DICHLOROBENZENE, 1,2-	ND (1.5)	ug/Kg
DICHLOROBENZENE, 1,4-	ND (2.4)	ug/Kg

Client I.D. SB-11B
ERG Sample No. 02/146605
Matrix: SOIL

Parameter	Result	Units
PURGABLE AROMATICS		
BENZENE	ND (2.0)	ug/Kg
1,2-DICHLOROBENZENE	ND (4.0)	ug/Kg
1,3-DICHLOROBENZENE	ND (4.0)	ug/Kg
1,4-DICHLOROBENZENE	ND (3.0)	ug/Kg
ETHYLBENZENE	ND (2.0)	ug/Kg
TOLUENE	3.0	ug/Kg
CHLOROBENZENE	ND (2.0)	ug/Kg
PURGABLES, 601		
CHLOROMETHANE	ND (0.8)	ug/Kg
BROMOMETHANE	ND (11.8)	ug/Kg
DICHLORODIFLUOROMETHANE	ND (18.1)	ug/Kg
VINYL CHLORIDE	ND (1.8)	ug/Kg
CHLOROETHANE	ND (5.2)	ug/Kg
METHYLENE CHLORIDE	3.2	ug/Kg
TRICHLOROFLUOROMETHANE	ND (5.0)	ug/Kg
DICHLOROETHYLENE, 1,1-	ND (1.3)	ug/Kg
DICHLOROETHANE, 1,1-	ND (0.7)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND (1.0)	ug/Kg
CHLOROFORM	ND (0.5)	ug/Kg
DICHLOROETHANE, 1,2-	0.39	ug/Kg
TRICHLOROETHANE, 1,1,1-	ND (0.3)	ug/Kg
CARBON TETRACHLORIDE	ND (1.2)	ug/Kg
BROMODICHLOROMETHANE	ND (1.0)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (0.4)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (3.4)	ug/Kg
TRICHLOROETHYLENE	ND (1.2)	ug/Kg
DIBROMOCHLOROMETHANE	ND (0.9)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND (0.2)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (2.0)	ug/Kg
CHLOROETHYLVINYL ETHER, 2-	ND (1.3)	ug/Kg
BROMOFORM	ND (2.0)	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	*	
TETRACHLOROETHYLENE	0.50*	ug/Kg
CHLOROBENZENE	ND (2.5)	ug/Kg
DICHLOROBENZENE, 1,3-	ND (3.2)	ug/Kg
DICHLOROBENZENE, 1,2-	ND (1.5)	ug/Kg
DICHLOROBENZENE, 1,4-	ND (2.4)	ug/Kg

 See last page for explanation of symbols

Table A-10. Results of 2/20/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4003
Report Date: 03-07-86

Client I.D.: SB-11B
ERG Sample No: 02/146605
Matrix: SOIL

Parameter	Result	Units

Comments: 1,1,2,2-TETRACHLOROETHANE AND TETRACHLOROETHYLENE COELUTE. VALUE REPORTED COULD REPRESENT A POSSIBLE COMBINATION OF THE TWO COMPOUNDS. TETRACHLOROETHYLENE WAS USED TO CALCULATE RESULTS.

Client I.D.: SB-12
ERG Sample No: 02/146606
Matrix: SOIL

Parameter	Result	Units
PURGABLE AROMATICS		
BENZENE	ND (2.0)	ug/Kg
1,2-DICHLOROBENZENE	ND (4.0)	ug/Kg
1,3-DICHLOROBENZENE	ND (4.0)	ug/Kg
1,4-DICHLOROBENZENE	ND (3.0)	ug/Kg
ETHYLBENZENE	ND (2.0)	ug/Kg
TOLUENE	2.8	ug/Kg
CHLOROBENZENE	ND (2.0)	ug/Kg
PURGABLES, 601		
CHLOROMETHANE	ND (0.8)	ug/Kg
BROMOMETHANE	ND (11.8)	ug/Kg
DICHLORODIFLUOROMETHANE	ND (18.1)	ug/Kg
VINYL CHLORIDE	ND (1.8)	ug/Kg
CHLOROETHANE	ND (5.2)	ug/Kg
METHYLENE CHLORIDE	ND (2.5)	ug/Kg
TRICHLOROFLUOROMETHANE	ND (5.0)	ug/Kg
DICHLOROETHYLENE, 1,1-	ND (1.3)	ug/Kg
DICHLOROETHANE, 1,1-	ND (0.7)	ug/Kg
TRANS-1,2-DICHLOROETHYLENE	ND (1.0)	ug/Kg
CHLOROFORM	ND (0.5)	ug/Kg
DICHLOROETHANE, 1,2-	ND (0.3)	ug/Kg
TRICHLOROETHANE, 1,1,1-	ND (0.3)	ug/Kg
CARBON TETRACHLORIDE	ND (1.2)	ug/Kg
BROMODICHLOROMETHANE	ND (1.0)	ug/Kg
DICHLOROPROPANE, 1,2-	ND (0.4)	ug/Kg
TRANS-1,3-DICHLOROPROPENE	ND (3.4)	ug/Kg
TRICHLOROETHYLENE	ND (1.2)	ug/Kg
DIBROMOCHLOROMETHANE	ND (0.9)	ug/Kg
TRICHLOROETHANE, 1,1,2-	ND (0.2)	ug/Kg
CIS-1,3-DICHLOROPROPENE	ND (2.0)	ug/Kg
CHLOROETHYLVINYL ETHER, 2-	ND (1.3)	ug/Kg
BROMOFORM	ND (2.0)	ug/Kg
TETRACHLOROETHANE, 1,1,2,2-	ND (0.3)	ug/Kg
TETRACHLOROETHYLENE	ND (0.3)	ug/Kg
CHLOROBENZENE	ND (2.5)	ug/Kg

 See last page for explanation of symbols.

Table A-10. Results of 2/20/85 Soil Sampling (Continued)

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4003
Report Date: 03-07-86

Client I.D.: SB-12
ERG Sample No: 02/146606
Matrix: SOIL

Parameter	Result	Units
DICHLOROBENZENE, 1,3-	ND (3.2)	ug/Kg
DICHLOROBENZENE, 1,2-	ND (1.5)	ug/Kg
DICHLOROBENZENE, 1,4-	ND (2.4)	ug/Kg

Project Notes: CONTRACT #F33615-85-D-5409 D.O.3

SD-Sample damaged
FR-See field report for result
SR-See attached report
NA-Result not applicable to test

ND-Nondetected, Detection limit in ()
<-Positive result at an unquantifiable concentration below indicated level

Thank you for your business.

Table A-10. Results of 2/20/85 Soil Sampling (Continued)

TABLE A-11. SOIL CHEMICAL ANALYSES RESULTS

Lab No.	Sample No.	Description	Pct dry weight																				μg/g			
			Total Fe	Fe+2	Si	Ca	Mg	Al	C	S	P	Na	K	LOI 110°C	LOI 1000°C	Ti	Cr	Mn	Cu	Ni	Co	Zn	Pb	V	Cd	Sb	As	Tl
5594	B-7	Red Sediment	43.8		7.5	6.4	.17	.70									.011					.12	.018		<10	450	200	<100
5596	8B-7	25' depth	11.4		24.3	3.2	1.5	4.6	.42	<.005	.50	.30	2.6		9.2	<.3	.029	.028	<.010	<.010	<.010	.018	<.010	.012	<10	270	<10	<100
5598	8B-9B	-14/+200 mesh	1.9	<.10	11.0	28.	.31	.63	7.9	.038	.28	.052	.38	.26	31.6	<.3	.032	.025	.015	<.010	<.010	.015	<.010	<.010	<10	360	<10	<100
5599	8B-9C	-200 mesh	2.9	<.10	15.1	19.4	.51	3.0	5.1	.032	.076	.33	.81	.38	26.5	<.3	.21	.045	.022	<.010	<.010	.015	.011	<.010	<10	210	<10	<100
5600	8B-10B	-14/+200 mesh	2.3	<.10	8.9	29.1	.37	.76	8.7	.032	.41	.05	.50	.34	33.0	<.3	.049	.058	.010	<.010	<.010	<.005	<.010	<.010	<10	250	<10	<100
5601	8B-10C	-200 mesh	4.2	<.10	15.9	18.5	.58	3.4	5.3	.022	.056	.20	.90	2.0	25.2	<.3	.16	.070	.014	<.010	<.010	.009	<.010	<.010	<10	128	<10	<100
5602	8B-11B	-14/+200 mesh	8.2	.57	16.8	15.3	1.2	2.6	3.5	.032	.58	.11	2.5	1.4	19.4	<.3	.082	.028	.010	<.010	<.010	.007	<.010	<.010	<10	177	<10	<100
5603	8B-11C	-200 mesh	7.5	<.10	20.4	10.6	.78	4.3	2.7	.020	<.020	.26	1.3	1.8	17.7	.31	.30	.041	.013	<.010	<.010	.020	<.010	.011	20	176	<10	<100
5604	8B-12B	-14/+200 mesh	6.4	.23	14.2	19.4	.97	2.0	4.8	.028	.52	.10	1.8	1.2	23.6	<.3	.084	.021	<.010	<.010	<.010	.005	<.010	<.010	<10	247	<10	<100
5605	8B-12C	-200 mesh	6.0	<.10	18.3	11.7	.7	3.3	3.4	.03	<.020	.1	1.1	1.0	20.8	.32	.38	.035	.011	<.010	<.010	.012	<.010	<.010	<10	186	<10	<100

LOI loss on ignition

Source: U.S. Bureau of Mines

TABLE A-12. SIZE FRACTIONS AND WEIGHTS FOR SOILS

Sample No.	Size, Mesh (M)	Weight, g	Weight-percent	Weight of aliquot for Chem. Anal., g
SB9	+14	220.3	75.2	
	-14/+200	41.7	14.2	13.1
	-200	30.9	10.5	29.5
	TOTAL	292.9 g	99.9	
SB10	+14	99.5	66.6	
	-14/+200	25.8	17.3	10.2
	-200	24.1	16.1	22.7
	TOTAL	149.4	100.0	
SB11	+14	305.6	60.0	
	-14/+200	98.3	19.3	11.1
	-200	105.4	20.7	25.1
	TOTAL	509.3	100.0	
SB12	+14	221.7	66.1	
	-14/+200	53.7	16.0	11.2
	-200	59.8	17.8	21.3
	TOTAL	335.2	99.9	

Source: U.S. Bureau of Mines

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APPENDIX B

RESULTS OF FIELD TEST KIT ANALYSES

TABLE B-1. RESULTS OF GROUNDWATER TEMPERATURE MONITORING (C)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5-23	25.5	25.0	28.0	26.0	27.0	27.0	27.5	28.5	28.0	28.0	29.5	28.0	28.0	27.0	27.0	NA
6-17	48.9	34.5	48.8	36.4	38.9	34.2	39.9	47.8	38.1	31.4	26.9	29.3	29.6	20.8	22.3	22.1
6-19	48.9	38.0	36.6	37.1	34.4	36.8	35.5	44.5	34.8	28.0	30.1	28.4	27.1	21.0	22.5	22.2
6-27	46.3	28.7	36.8	36.7	36.4	34.2	36.5	45.3	39.2	28.4	28.2	29.3	29.4	20.9	22.2	22.2
7-1	35.4	28.9	32.8	29.5	31.3	29.2	33.7	31.0	33.5	28.2	30.3	28.2	26.8	24.8	30.7	NA
7-5	28.1	26.9	27.0	28.1	27.5	28.4	28.8	29.6	27.3	26.1	25.9	25.6	28.8	22.9	24.0	NA
7-8	38.1	31.0	26.9	34.8	26.6	33.6	26.6	35.2	27.4	NA	26.6	27.7	26.9	23.6	23.9	NA
7-12	36.9	29.9	27.3	33.2	27.3	34.3	27.9	35.2	28.8	27.2	25.0	26.7	26.1	22.3	23.2	23.4
7-16	29.8	28.3	34.9	27.0	30.2	26.6	29.8	26.9	30.0	29.8	29.1	31.8	30.7	23.4	24.7	24.8
7-18	30.6	38.2	28.2	30.5	27.1	31.0	27.3	34.7	27.8	30.1	31.7	34.1	34.1	23.7	24.0	23.8
7-22	36.0	28.8	37.3	26.7	35.4	26.6	37.1	28.1	37.9	28.2	27.2	31.2	31.4	23.6	24.7	NA
7-25	32.0	27.3	29.9	26.1	29.3	26.2	29.5	26.6	30.1	27.3	26.0	26.9	27.1	23.4	24.2	24.1
7-30	34.0	29.1	29.8	28.8	32.9	34.8	35.2	34.7	37.7	27.0	27.3	29.1	28.6	23.9	24.5	24.8
8-3	32.8	29.9	29.7	29.0	31.2	33.3	34.7	35.1	35.0	27.0	27.2	29.1	28.3	23.9	24.5	24.8
8-6	31.0	29.0	28.9	28.8	30.2	31.5	32.6	33.1	32.8	27.0	27.1	28.5	28.1	23.8	24.6	25.0
8-8	28.5	26.9	28.7	28.4	27.2	26.6	27.4	27.1	27.8	33.7	30.4	30.5	31.7	25.3	26.3	NA
8-12	NA	27.3	38.0	27.7	36.9	27.7	38.4	30.5	39.7	31.5	31.0	33.1	37.8	24.1	24.0	24.4
8-14	NA	27.1	40.6	26.2	33.9	26.9	34.0	28.7	33.3	29.3	30.9	30.6	31.2	23.5	23.2	NA
8-20	NA	28.1	31.6	27.0	33.6	27.6	27.4	27.7	37.6	26.3	33.2	34.9	37.0	24.8	24.5	24.7
8-22	30.4	44.9	28.4	36.3	27.8	36.6	27.5	38.6	28.7	29.8	29.7	32.2	31.3	23.6	23.8	23.6
8-27	27.2	26.7	27.0	25.8	27.2	26.0	26.3	26.8	27.0	28.9	28.6	27.6	28.3	23.9	23.7	24.1
8-30	28.2	35.6	26.6	31.1	26.9	32.6	26.7	39.1	27.6	27.6	28.0	33.0	30.6	24.0	24.8	24.3
9-3	36.1	26.9	27.0	26.3	26.6	26.6	26.9	26.0	29.1	NA	NA	31.2	31.6	23.7	24.7	24.4
9-6	31.1	32.8	27.0	35.0	27.4	35.9	26.8	38.0	34.2	26.8	26.2	27.4	27.4	24.1	23.6	23.9
9-12	28.5	28.3	27.9	29.7	28.3	29.0	29.2	29.3	29.6	27.4	27.5	27.9	27.9	23.2	24.2	24.6
9-17	28.0	28.1	28.6	29.1	29.0	27.0	27.5	29.4	29.8	28.0	28.4	27.9	27.8	24.9	24.7	NA
9-20	26.6	26.5	27.0	31.5	30.8	34.5	29.0	34.9	31.1	28.1	29.0	29.8	29.4	23.8	24.0	23.7
9-23	28.1	28.0	29.0	29.4	29.8	29.7	31.0	32.6	32.2	NA	NA	NA	NA	NA	NA	NA
9-28	25.9	25.5	28.2	25.1	25.4	27.0	26.0	26.8	27.1	25.6	27.3	27.6	27.1	22.5	23.0	23.4
9-30	22.7	NA	21.6	25.8	29.5	28.2	26.9	28.5	28.4	NA	NA	NA	NA	NA	NA	NA
10-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	17.6	24.8	24.0	25.3	22.2	19.9	22.0
10-4	28.5	27.9	26.5	25.7	26.6	26.8	27.1	26.2	25.4	25.7	26.5	27.2	25.4	25.7	26.2	23.2
10-7	25.6	25.8	25.2	26.1	26.0	24.8	25.5	26.6	25.5	26.5	27.1	27.2	26.7	22.9	23.1	23.5
10-11	26.4	26.2	25.1	25.7	25.5	25.2	25.0	26.5	25.7	27.0	26.7	27.4	27.2	23.9	24.6	23.9

TABLE B-1. RESULTS OF GROUNDWATER TEMPERATURE MONITORING (C) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
10-14	27.9	27.2	26.1	27.8	27.0	27.7	27.4	27.5	26.1	26.2	26.1	26.8	26.6	24.3	24.1	25.6
10-18	28.8	29.8	32.9	32.2	31.8	30.9	30.8	30.3	30.3	26.1	27.4	27.7	27.2	24.2	24.4	24.3
10-21	28.1	NA	31.0	31.4	26.1	31.3	28.8	26.5	26.0	24.4	24.2	25.0	24.6	NA	NA	NA
10-23	28.1	28.0	29.0	29.4	29.8	29.7	31.0	32.6	32.2	NA	NA	NA	NA	NA	NA	NA
10-25	25.6	25.3	25.3	25.5	25.8	26.3	25.9	NA	27.7	25.9	26.0	26.4	26.2	26.5	25.7	24.0
10-28	26.1	25.7	26.7	26.9	25.0	27.0	25.8	NA	25.7	25.2	25.9	26.4	26.4	24.1	26.0	24.5
11-2	23.3	22.2	23.2	20.1	23.1	22.3	23.0	22.2	21.9	22.4	23.1	23.9	20.2	21.5	21.7	21.8
11-4	23.2	22.3	23.7	25.8	26.8	26.9	26.9	26.4	26.3	25.4	25.3	25.6	25.6	23.1	23.2	23.0
11-8	25.8	25.8	28.9	29.6	25.2	30.3	27.9	30.2	34.0	24.5	25.4	25.5	26.1	25.0	24.4	24.8
11-11	25.2	25.5	25.5	27.0	26.9	28.0	28.0	29.0	31.0	25.8	25.8	26.0	26.5	25.6	NA	23.8
11-18	26.2	NA	26.5	25.0	26.2	28.3	28.0	27.0	26.8	25.0	25.0	25.8	25.7	24.9	24.8	24.9
11-21	21.0	21.1	24.1	23.6	20.2	21.9	23.9	22.8	22.7	22.2	21.8	20.3	18.2	20.4	22.0	21.5
11-25	22.9	21.9	21.8	21.4	22.0	22.3	22.3	22.2	22.8	17.8	21.2	21.1	21.8	21.5	21.1	18.8
12-6	21.5	21.7	22.0	22.1	24.1	25.5	26.5	24.5	23.1	20.0	20.5	20.8	21.2	16.8	18.7	18.8
12-9	24.6	24.2	24.3	24.5	24.9	24.7	24.9	24.8	25.4	23.7	24.1	23.9	24.2	NA	NA	NA
12-12	17.0	18.5	22.0	23.0	23.5	22.0	23.2	24.0	23.0	18.2	20.7	17.0	21.5	21.5	22.0	21.5
12-16	24.0	24.8	24.9	25.3	25.0	25.0	25.0	25.5	26.0	20.7	21.0	21.7	22.5	NA	NA	NA
12-19	23.8	27.0	25.0	25.0	24.5	24.0	25.5	25.0	25.5	22.0	23.4	22.1	22.5	24.0	23.0	23.0
12 23	23.5	23.0	23.2	23.3	23.3	23.2	23.8	24.0	25.5	21.0	21.2	21.1	22.8	NA	NA	NA
12-26	20.2	20.0	20.7	20.5	20.0	20.5	21.0	20.2	20.9	18.0	17.9	18.1	18.0	20.0	19.8	19.7
12-30	22.6	22.2	22.2	22.5	22.9	22.1	23.0	22.9	23.2	19.1	19.3	19.3	20.9	NA	NA	NA
1-2	21.0	21.2	20.9	21.2	21.1	21.3	22.0	21.9	21.9	19.2	19.1	19.5	19.5	21.2	22.0	22.0
1-6	20.5	20.5	21.5	19.5	22.0	21.0	22.0	22.0	21.5	18.0	19.0	19.0	19.5	NA	NA	NA
1-9	19.0	18.0	19.0	17.0	20.0	19.5	21.0	19.0	20.5	NA	NA	NA	NA	18.0	20.5	20.0
1-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	17.8	16.6	16.3	19.2	NA	NA	NA
1-13	22.3	22.8	23.2	21.5	22.2	22.8	23.2	22.5	22.8	19.6	18.8	20.1	20.0	NA	NA	NA
1-16	21.8	23.1	22.9	23.6	24.6	22.1	26.7	23.3	21.7	21.4	21.3	21.1	21.2	21.1	21.8	21.1
1-20	24.3	24.6	23.8	26.6	25.7	25.3	24.8	28.3	25.9	22.8	22.7	21.9	22.4	NA	NA	NA
1-24	21.4	20.7	21.6	21.8	21.3	22.7	21.4	21.9	22.2	19.3	20.7	20.4	20.8	20.7	20.9	20.9
1-28	22.6	22.8	23.6	23.0	23.6	23.5	23.1	22.2	23.6	21.1	21.1	20.3	21.3	NA	NA	NA
1-31	23.2	23.4	24.3	23.2	23.4	24.1	22.7	23.4	24.4	21.9	21.5	21.3	22.3	21.2	22.5	22.3
2-4	22.8	23.1	23.6	22.7	23.7	22.9	23.4	22.2	23.6	21.7	21.7	21.3	21.7	NA	NA	NA
2-7	22.9	22.3	23.1	21.9	22.2	22.6	21.7	22.8	22.8	20.6	19.8	19.6	21.1	20.4	21.6	21.5
2-11	22.8	22.5	22.8	21.8	22.1	22.8	22.3	23.2	22.7	21.2	21.0	20.9	20.2	NA	NA	NA

TABLE B-1. RESULTS OF GROUNDWATER TEMPERATURE MONITORING (C) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
2-17	22.8	22.7	22.8	22.2	21.8	23.3	22.4	22.7	22.6	20.6	20.5	20.6	20.1	20.5	21.0	20.8

Notes:

NA - Not Available
Temperature readings taken with meter

TABLE B-2. RESULTS OF GROUNDWATER CONDUCTIVITY MONITORING (x1000 umhos)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	11	12	13	14	M1	M2	CC
5-23	0.66	0.68	0.60	0.59	0.60	0.58	0.64	0.69	0.77	0.72	0.50	0.62	0.78	0.82	0.53	NA
6-17	0.95	0.65	1.28	0.73	1.15	0.78	0.97	1.37	2.07	4.20	3.61	3.12	3.47	0.58	0.93	0.89
6-19	1.27	0.87	1.71	0.87	1.34	0.84	1.05	1.61	2.98	4.29	4.75	4.15	4.21	0.57	0.97	0.88
6-27	1.40	NA	1.01	0.96	1.01	0.85	1.10	1.02	3.69	2.56	2.75	1.43	1.15	0.59	0.89	0.93
7-1	1.38	0.91	0.98	0.73	0.89	0.67	0.93	0.81	3.40	7.42	9.39	2.18	1.78	5.01	7.82	NA
7-5	1.61	1.38	1.10	0.95	0.98	1.30	1.05	1.10	2.94	10.48	15.21	NA	8.87	0.62	1.07	NA
7-8	1.41	0.99	0.84	0.80	0.77	0.87	0.93	0.93	1.67	NA	17.20	NA	11.20	0.54	0.97	NA
7-12	1.44	0.99	0.80	0.74	0.75	0.78	0.80	0.86	2.60	NA	NA	NA	13.20	0.55	0.90	0.85
7-16	1.41	1.03	1.63	0.66	1.18	0.72	0.97	0.79	3.16	1.75	1.74	1.84	1.83	0.55	0.92	0.84
7-18	1.44	1.10	1.36	0.83	1.11	0.68	0.93	1.28	2.70	0.86	0.91	1.06	0.92	0.52	0.96	0.80
7-22	1.67	1.43	1.14	0.68	1.20	0.70	0.88	0.72	2.99	9.16	10.50	NA	NA	0.58	1.03	NA
7-25	1.88	1.25	1.14	0.63	1.09	0.61	0.80	0.70	2.37	14.79	13.30	3.29	0.75	0.52	0.94	0.75
7-30	NA	NA	1.21	0.91	1.73	0.86	1.00	1.05	3.31	19.45	10.01	15.42	16.28	0.68	1.27	0.90
8-3	1.10	0.97	1.20	0.95	1.56	0.93	0.97	1.01	2.74	17.10	9.15	14.76	16.51	0.68	1.32	0.86
8-6	6.15	1.00	1.21	1.03	1.61	0.92	0.93	1.05	2.01	16.10	10.15	14.57	16.37	0.71	1.25	0.92
8-8	2.63	1.27	1.11	0.81	1.19	0.78	1.17	1.06	3.34	18.74	13.20	13.84	NA	0.66	1.54	NA
8-12	NA	2.51	1.22	0.85	2.01	0.97	1.53	1.33	4.59	10.27	9.01	12.40	2.24	0.61	1.82	0.88
8-14	NA	2.50	1.37	0.85	2.48	1.39	1.66	1.32	4.36	2.68	2.69	2.67	2.77	2.68	2.69	NA
8-20	NA	2.77	1.47	1.05	2.80	1.41	1.35	1.13	4.75	8.49	2.42	2.38	2.41	0.69	2.05	1.05
8-22	4.89	3.22	1.77	1.31	2.95	1.53	1.43	2.29	4.44	1.28	NA	1.74	1.37	0.88	2.39	1.21
8-27	4.73	3.31	1.44	1.19	3.38	1.59	1.36	1.35	4.67	NA	NA	NA	NA	0.78	2.29	1.09
8-30	5.40	3.00	1.71	1.39	2.91	1.55	1.50	2.19	6.02	NA	1.55	1.53	1.57	0.72	2.18	1.03
9-3	4.97	4.10	1.83	1.40	3.04	1.27	1.24	1.36	5.58	NA	NA	NA	NA	0.93	2.75	1.28
9-6	3.17	2.56	1.57	1.16	2.24	1.19	1.20	0.91	3.42	1.97	1.92	2.88	2.40	0.56	1.73	0.82
9-12	2.11	1.73	0.70	0.44	0.80	0.44	0.47	0.50	1.78	1.26	10.37	1.44	1.23	0.33	1.03	0.45
9-17	3.12	3.21	1.28	1.38	1.03	1.29	1.56	0.83	2.55	NA	16.80	NA	NA	0.38	1.38	NA
9-20	3.28	3.53	1.35	0.82	1.19	0.76	0.84	0.86	2.91	1.27	1.24	1.29	1.26	0.38	0.16	0.81
9-23	3.23	2.97	2.47	1.48	1.81	1.35	1.41	0.81	0.80	NA	NA	NA	NA	NA	NA	NA
9-28	3.30	3.40	1.62	0.81	1.24	0.87	0.80	0.78	2.62	3.24	1.64	1.95	2.09	0.61	1.82	0.89
9-30	3.20	NA	1.45	0.83	1.06	0.79	0.81	1.45	2.86	NA	NA	NA	NA	NA	NA	NA
10-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.61	1.61	1.54	1.23	0.36	1.69	0.85
10-4	2.76	3.12	1.22	0.74	1.02	0.76	0.85	0.78	2.54	2.16	3.53	1.48	1.67	0.31	1.22	0.79
10-7	3.03	3.57	1.40	0.79	1.39	0.85	0.84	0.90	3.09	1.66	2.39	2.36	2.62	0.37	0.86	1.79
10-11	3.28	3.97	1.65	0.86	1.69	0.97	0.91	1.15	2.87	7.17	6.65	2.89	3.89	0.54	1.89	0.90

TABLE B-2. RESULTS OF GROUNDWATER CONDUCTIVITY MONITORING (x1000 umhos) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
10-14	3.16	4.03	1.41	0.97	2.21	0.82	0.82	1.20	3.62	6.53	11.42	8.85	5.80	0.50	1.69	0.83
10-18	2.97	1.40	1.41	0.82	1.22	0.82	1.29	1.32	4.15	2.93	7.00	6.19	9.12	0.28	1.54	0.82
10-21	3.28	NA	1.25	0.84	0.91	1.25	3.18	2.23	4.49	1.79	2.01	1.63	2.10	NA	NA	NA
10-23	3.23	2.97	2.47	1.48	1.81	1.35	1.41	0.81	0.80	NA	NA	NA	NA	NA	NA	NA
10-25	3.04	2.84	1.21	0.93	0.94	1.18	2.35	NA	2.37	2.04	2.05	2.13	2.08	0.28	1.37	0.87
10-28	3.08	2.78	1.38	0.93	1.05	0.96	1.68	NA	3.00	1.33	6.45	14.05	8.95	0.28	1.55	0.90
11-2	3.34	2.57	1.65	0.92	1.07	0.96	1.32	0.94	2.38	NA	NA	6.17	1.78	0.29	1.26	0.96
11-4	3.10	2.35	1.45	0.83	0.95	0.84	1.10	0.85	2.78	16.40	18.30	NA	NA	0.44	1.45	0.86
11-8	3.15	2.52	1.54	0.84	1.01	0.94	0.97	0.92	2.41	2.08	2.18	1.95	1.83	0.50	1.42	9.16
11-11	3.00	2.60	1.58	0.86	1.05	0.89	0.96	0.93	2.35	1.20	1.10	1.08	0.94	0.41	1.15	0.91
11-18	2.90	NA	1.23	0.86	1.32	0.84	0.85	1.03	2.10	1.30	1.45	1.55	1.28	0.49	2.10	0.86
11-21	2.85	2.79	1.83	0.92	1.43	0.93	0.92	0.84	2.48	1.63	1.50	1.88	1.82	0.52	2.40	0.92
11-28	2.59	3.08	1.63	0.79	1.22	0.75	0.86	0.88	2.50	1.10	1.18	0.81	0.85	0.36	2.17	0.89
12-6	2.80	3.03	1.78	0.82	1.37	0.79	0.84	0.84	2.20	1.42	1.35	1.30	0.99	0.58	2.03	0.91
12-9	2.95	3.19	2.02	0.86	1.73	0.85	0.91	0.90	2.11	1.08	1.18	1.03	1.20	NA	NA	NA
12-12	3.10	3.30	2.15	1.00	1.55	0.87	0.90	0.88	2.00	1.15	1.12	1.22	1.25	0.52	1.80	0.97
12-16	4.90	6.00	2.18	0.95	1.65	0.88	0.88	0.84	2.40	1.55	1.42	1.48	1.42	NA	NA	NA
12-19	2.98	2.40	2.20	0.88	1.50	0.95	0.84	0.96	2.08	1.25	1.30	1.13	1.08	0.52	1.98	0.92
12-23	2.88	2.67	2.33	0.86	1.57	0.88	0.86	0.85	2.32	1.51	1.38	1.45	1.28	NA	NA	NA
12-26	2.92	2.62	2.31	0.87	1.51	0.80	0.88	0.91	2.17	1.19	1.18	1.10	1.10	0.53	1.79	0.91
12-30	2.87	2.50	2.23	0.82	1.73	0.78	0.88	0.83	1.97	1.13	1.17	1.10	1.08	NA	NA	NA
1-2	2.80	2.55	2.19	0.83	1.70	0.89	0.86	0.96	2.21	1.36	1.32	1.41	1.41	0.58	1.75	0.90
1-6	2.75	2.55	2.25	0.83	1.75	0.83	0.91	0.93	2.10	1.35	1.35	1.25	1.20	NA	NA	NA
1-9	2.85	2.55	2.20	0.90	1.90	0.85	0.95	0.90	1.95	NA	NA	NA	NA	0.53	1.50	0.90
1 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.32	1.38	1.37	1.27	NA	NA	NA
1-13	2.84	2.52	2.16	0.83	1.71	0.76	0.88	0.92	1.92	1.22	1.17	1.08	0.98	NA	NA	NA
1-16	2.76	2.37	2.08	0.82	0.71	0.73	0.71	0.80	1.72	0.96	1.05	0.92	0.87	0.62	1.60	0.88
1-20	3.04	2.88	2.78	0.84	1.35	0.83	0.82	0.91	2.10	1.15	1.21	1.25	1.25	NA	NA	NA
1-24	2.76	2.81	1.94	0.82	1.31	0.78	0.81	0.82	1.88	1.12	1.04	1.05	0.82	0.59	1.50	0.88
1-28	2.78	2.74	2.11	0.78	1.40	0.71	0.80	0.70	1.79	1.16	1.01	1.06	1.03	NA	NA	NA
1-31	2.84	2.86	2.03	0.83	1.38	0.77	0.81	0.87	2.01	1.36	1.14	1.33	0.84	0.66	1.41	0.89
2-4	2.52	2.62	1.71	0.77	1.18	0.75	0.78	0.86	1.74	1.37	0.99	1.16	0.74	NA	NA	NA
2-7	2.82	2.99	1.84	0.87	1.05	0.84	1.03	0.94	1.73	1.33	1.03	0.94	0.96	0.53	0.98	0.89
2-11	2.79	2.87	1.91	0.90	1.00	0.85	0.96	0.95	1.84	1.32	0.94	0.96	0.97	NA	NA	NA

TABLE B-2. RESULTS OF GROUNDWATER CONDUCTIVITY MONITORING (x1000 umhos) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
2-17	2.76	3.11	1.86	0.87	1.12	0.91	1.04	0.97	1.71	1.25	1.01	0.96	0.98	0.50	0.98	0.91

Notes:

NA - Not Available
Conductivity readings taken with meter

TABLE B-3. RESULTS OF GROUNDWATER pH MONITORING

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5 23	6.4	6.8	6.7	> 7.0	> 7.0	> 7.0	> 7.0	> 7.0	> 7.0	7.2	7.2	7.2	7.0	7.2	7.2	NA
6 17	7.0	7.3	7.1	7.5	7.2	7.1	6.9	7.0	7.3	6.8	6.8	6.8	6.8	7.2	6.7	6.7
6 19	6.6	7.0	6.3	6.4	6.3	6.4	6.1	6.1	6.1	6.8	7.0	6.9	6.9	7.1	6.7	6.8
6 27	6.3	NA	6.1	6.2	6.1	6.1	5.9	6.1	5.8	6.9	6.9	7.0	7.0	7.2	6.9	6.8
7 1	6.2	6.6	6.5	6.5	6.5	6.4	6.2	6.2	6.1	6.9	6.8	6.6	6.7	6.7	6.4	NA
7 5	6.3	6.4	6.4	6.4	6.5	6.2	6.3	6.3	6.3	6.9	7.0	6.7	6.8	6.7	6.1	NA
7 8	6.0	6.6	6.4	6.3	6.5	6.2	6.2	6.1	6.2	NA	6.8	6.7	6.6	6.5	6.1	NA
7 12	6.0	6.6	6.2	6.4	6.3	6.2	6.2	6.1	6.3	7.1	6.9	6.8	6.8	6.6	6.1	6.2
7 16	6.6	6.9	6.4	6.9	6.4	6.5	6.3	6.3	6.3	6.7	6.7	7.0	6.9	6.8	6.4	6.6
7 18	6.4	6.4	6.3	6.4	6.3	6.4	6.2	6.1	6.1	6.9	6.9	7.0	6.9	6.8	6.3	6.4
7 22	6.4	6.3	6.1	6.5	6.4	6.3	6.1	6.2	6.1	6.9	6.9	6.9	6.9	6.7	6.4	NA
7 25	6.6	6.6	6.4	6.5	6.4	6.5	6.3	6.4	6.3	7.4	7.4	7.3	7.5	7.3	6.8	6.9
7 30	NA	NA	7.3	7.4	6.6	6.7	6.5	6.6	6.6	7.5	7.7	7.4	7.4	7.1	6.8	7.0
8 3	6.9	7.4	7.5	7.4	6.6	6.7	6.6	6.6	6.6	7.5	7.7	7.5	7.5	7.0	6.9	7.0
8 6	6.9	7.5	7.5	7.5	6.7	6.7	6.6	6.7	6.7	7.4	7.6	7.6	7.5	7.0	6.9	7.0
8 8	6.9	7.3	7.1	7.3	7.0	6.9	6.7	6.7	6.7	6.8	6.8	6.8	6.8	6.3	6.3	NA
8 12	NA	7.0	6.7	7.0	6.6	6.6	6.4	6.5	6.3	7.0	7.0	7.0	7.4	6.6	6.5	6.8
8 14	NA	6.5	6.6	6.8	6.4	6.5	6.5	6.5	6.4	7.4	7.5	7.7	7.3	6.9	6.6	NA
8 20	NA	6.9	6.8	6.9	6.6	6.6	6.8	6.7	6.6	6.8	7.3	7.7	7.4	6.5	6.3	6.7
8 22	6.7	7.1	6.8	6.8	6.6	6.8	6.7	6.5	6.6	7.7	7.1	7.5	7.5	7.2	6.6	6.9
8 27	6.5	6.7	6.9	7.0	6.7	6.8	6.8	6.8	6.6	7.0	7.1	7.2	7.2	7.2	6.7	7.0
8 30	6.7	7.0	6.9	6.9	6.8	6.8	6.8	6.6	6.5	7.1	7.3	7.6	7.5	7.0	6.4	6.9
9 3	6.4	6.7	6.8	6.8	6.8	6.7	6.7	6.4	6.5	NA	NA	7.0	7.0	7.0	6.6	6.9
9 6	6.4	6.6	6.2	6.1	6.3	6.3	6.3	6.2	6.1	7.3	7.5	7.0	7.0	6.4	6.1	6.4
9 12	5.7	5.9	6.0	6.1	6.0	6.0	6.0	6.0	5.9	6.9	6.4	6.5	6.6	6.2	5.8	5.9
9 17	5.7	6.0	6.1	6.2	6.2	5.9	5.9	6.0	6.0	6.5	6.4	6.5	6.5	6.3	5.7	NA
9 20	6.3	6.2	6.4	6.3	6.4	6.3	6.1	6.1	6.0	6.9	7.0	7.0	7.0	6.5	6.0	6.3
9 23	6.0	6.5	6.1	6.0	6.0	6.0	5.8	5.8	5.8	NA	NA	NA	NA	NA	NA	NA
9 28	6.1	6.2	6.1	6.4	6.3	6.0	6.1	6.1	6.3	6.8	6.8	7.0	7.0	6.4	6.2	6.4
9 30	5.8	NA	6.3	6.3	6.2	5.9	5.9	5.8	6.0	NA	NA	NA	NA	NA	NA	NA
10 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5	6.5	6.3	6.4	6.3	5.7	5.8
10 4	5.6	5.7	5.6	5.7	5.6	5.6	5.5	5.7	5.8	6.2	6.1	6.6	6.3	6.2	5.6	5.8
10 7	5.9	5.9	6.1	5.9	5.8	5.8	5.9	5.9	6.0	6.7	6.5	6.5	6.4	6.5	6.1	5.8
10 11	6.1	6.2	6.1	6.2	6.1	6.1	6.2	6.3	6.2	6.6	6.5	6.6	6.6	6.5	6.1	6.4

TABLE B-3. RESULTS OF GROUNDWATER pH MONITORING (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
10-14	6.0	6.1	6.2	6.2	6.1	6.1	6.2	6.1	6.3	6.8	6.7	6.7	6.6	6.7	6.2	6.2
10-18	5.9	6.1	5.9	5.9	6.0	5.9	5.9	6.1	5.9	6.7	6.7	6.6	6.6	6.8	6.1	6.2
10-21	6.0	NA	5.8	6.2	6.1	5.8	5.6	5.9	5.7	6.9	7.0	6.9	6.7	NA	NA	NA
10-23	6.0	6.5	6.1	6.0	6.0	6.0	5.8	5.8	5.8	NA	NA	NA	NA	NA	NA	NA
10-25	6.5	6.4	6.4	6.4	6.5	6.2	6.1	NA	6.4	7.1	7.1	7.0	7.0	6.8	6.0	6.3
10-28	5.8	6.6	6.2	6.2	6.2	6.1	5.9	NA	6.2	6.7	6.5	6.6	6.6	6.8	5.8	6.0
11-2	6.2	6.5	6.2	6.3	6.2	6.2	6.2	6.4	6.5	6.7	6.7	6.6	6.8	6.6	6.2	6.3
11-4	5.7	6.5	5.9	5.8	6.0	5.9	5.8	5.7	5.8	6.2	6.2	6.2	6.2	6.2	5.5	5.7
11-8	6.8	7.4	6.9	7.0	6.9	7.0	7.0	7.2	7.1	7.5	7.4	7.5	7.5	7.4	6.8	6.8
11-11	6.9	6.9	6.9	6.9	6.9	6.9	6.9	7.0	6.9	7.6	7.6	7.5	7.6	7.2	6.8	7.0
11-18	6.8	NA	6.8	6.8	6.8	6.8	6.8	6.8	6.8	7.5	7.5	7.5	7.8	7.5	6.8	6.8
11-21	< 6.8	7.1	< 6.8	< 6.8	6.9	7.8	7.0	6.9	< 6.8	7.6	7.5	7.6	7.6	7.5	< 6.8	< 6.8
11-28	< 6.8	7.0	< 6.8	< 6.8	< 6.8	7.0	7.0	6.9	< 6.8	7.5	7.7	7.4	7.5	7.7	7.0	6.9
12-6	7.0	7.0	7.0	7.0	7.1	6.9	7.0	< 6.8	< 6.8	7.6	7.7	7.5	7.5	7.1	7.0	7.0
12-9	7.3	7.4	7.3	7.1	7.1	7.1	7.0	7.0	7.1	7.3	7.3	7.3	7.2	NA	NA	NA
12-12	7.1	6.9	6.9	6.9	6.9	6.9	6.9	6.9	9.0	6.9	7.0	7.0	7.0	6.8	6.9	6.9
12-16	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.1	7.0	7.0	7.0	7.1	NA	NA	NA
12-19	7.0	7.0	7.0	7.0	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.9	6.9
12-23	7.1	7.2	7.1	7.0	7.1	7.1	7.1	7.1	7.2	7.1	7.1	7.2	7.1	NA	NA	NA
12-26	7.1	7.1	7.0	7.1	7.1	7.0	7.1	7.1	7.1	7.1	7.1	7.0	7.1	7.0	6.9	7.1
12-30	7.1	7.1	7.0	7.1	7.0	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	NA	NA	NA
1-2	7.1	7.1	7.0	7.1	7.1	7.0	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.1	7.0	7.0
1-6	7.1	7.0	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.1	NA	NA	NA
1-9	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	NA	NA	NA	NA	7.1	7.1	7.1
1-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8	7.8	7.7	7.9	NA	NA	NA
1-13	6.9	7.1	7.0	7.1	6.9	7.1	7.1	7.0	6.9	7.8	7.9	7.8	7.8	NA	NA	NA
1-16	6.7	7.4	7.3	6.8	6.9	7.0	6.9	6.9	6.7	7.8	7.7	7.7	7.7	7.2	6.6	6.7
1-20	6.8	6.8	6.8	6.9	6.8	6.9	7.0	6.9	6.8	7.6	7.5	7.6	7.6	NA	NA	NA
1-24	6.8	7.5	6.8	7.0	6.9	6.9	7.0	7.0	6.8	8.1	8.1	7.3	8.1	7.4	6.8	6.9
1-28	6.7	6.8	6.7	6.8	6.8	6.9	6.9	7.0	6.7	7.6	7.7	7.6	7.6	NA	NA	NA
1-31	6.6	7.1	6.6	6.8	6.8	6.8	6.8	6.9	6.7	7.7	7.6	7.5	7.9	7.1	6.6	6.7
2-4	6.6	6.8	6.7	6.9	6.8	6.8	6.9	6.9	6.6	7.5	7.6	7.6	7.6	NA	NA	NA
2-7	6.6	6.9	6.7	6.9	6.8	6.8	6.8	6.9	6.8	7.6	7.6	7.6	7.7	7.2	6.7	6.7
2-11	6.5	6.8	6.7	6.8	6.8	6.9	6.8	6.9	6.8	7.6	7.5	7.5	7.5	NA	NA	NA

TABLE B-3. RESULTS OF GROUNDWATER pH MONITORING (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
2-17	6.5	6.9	6.8	6.9	6.8	6.9	6.8	7.0	6.8	7.1	7.4	7.4	7.5	7.1	6.7	6.9

Notes:

NA - Not Available
pH readings taken with meter

TABLE B-4. RESULTS OF GROUNDWATER DISSOLVED OXYGEN MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
6-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9	4.6	5.7	4.5	2.5	1.5	1.5
6-19	5.3	5.5	5.4	4.0	4.7	2.7	4.3	4.6	4.0	4.1	5.5	2.8	3.6	2.1	1.7	1.8
6-27	NA	NA	3.4	NA	3.8	NA	3.0	NA	3.8	6.6	7.7	7.6	6.4	0.8	1.0	NA
7-1	4.5	NA	3.9	3.2	3.6	2.7	2.8	4.4	NA	7.0	19.1	NA c	19.1	5.5	7.7	NA
7-5	3.5	5.8	3.2	2.8	3.2	2.9	2.7	2.3	3.3	NA c	NA c	18.8	14.5	1.8	2.5	NA
7-8	2.6	6.3	3.7	2.6	3.1	2.4	2.5	2.3	2.1	NA	NA c	17.6	NA c	1.5	2.5	NA
7-12	1.4	7.0	2.9	2.5	3.2	2.0	3.7	3.1	3.5	10.6	12.2	10.5	12.4	1.0	1.3	1.6
7-16	5.4	4.5	5.2	3.2	3.2	2.4	3.1	2.0	3.4	7.6	8.0	7.3	7.4	1.6	3.0	9.0
7-18	7.5	5.6	4.1	4.1	3.3	2.7	4.0	3.3	3.8	8.6	8.1	7.3	7.2	1.6	1.3	1.5
7-22	7.3	6.0	3.0	3.3	2.1	1.8	1.0	3.4	2.6	NA c	NA c	9.5	9.3	1.7	1.4	NA
7-25	1.8	5.7	1.8	2.9	5.1	2.3	1.2	3.1	4.2	NA c	NA c	16.1	17.9	2.7	1.6	1.8
7-30	3.1	5.7	2.7	2.3	2.2	1.5	1.2	1.1	3.1	15.0	11.8	6.2	7.6	2.2	1.3	1.6
8-3	3.5	5.0	3.1	2.4	2.1	1.6	1.3	1.0	3.3	15.1	16.3	7.3	6.9	2.1	1.4	1.4
8-6	3.6	5.1	3.3	2.5	2.3	2.1	1.4	1.2	3.3	15.1	16.1	7.2	7.1	2.1	1.5	1.4
8-8	3.8	6.2	1.8	2.4	3.9	2.2	3.1	2.6	3.8	11.5	11.9	12.1	11.8	1.7	1.2	NA
8-12	NA	6.0	1.5	3.1	1.5	2.5	1.6	2.7	2.3	8.9	8.6	6.8	6.7	2.1	1.6	1.6
8-14	NA	6.1	3.9	4.1	3.6	2.5	3.8	3.0	4.0	8.3	8.6	8.9	8.5	1.4	0.9	NA
8-20	NA	3.5	3.7	4.6	4.1	2.6	4.2	2.8	3.3	9.6	10.1	8.2	7.2	1.3	0.9	1.1
8-22	6.1	4.6	3.4	3.2	2.9	1.9	3.0	1.9	2.2	14.5	12.7	19.9	17.6	1.1	1.4	1.3
8-27	3.4	4.3	2.0	2.0	2.3	1.7	2.7	2.0	1.9	NA c	NA c	NA c	19.0	1.3	1.0	1.3
8-30	4.1	5.7	1.7	2.4	1.5	1.6	1.6	1.6	2.7	9.4	14.9	12.2	15.1	1.6	1.3	1.3
9-3	3.4	4.0	1.9	2.3	2.3	2.0	1.7	1.6	3.0	NA	NA	13.2	13.0	0.8	1.9	1.1
9-6	5.7	5.5	2.7	2.6	2.9	1.3	3.4	1.5	2.9	19.9	NA c	18.6	19.0	1.8	1.1	1.1
9-12	4.1	4.8	2.5	2.2	2.1	2.0	3.1	1.6	2.4	6.8	10.4	14.3	13.6	4.1	1.5	2.1
9-17	3.7	3.9	2.8	3.5	3.1	2.2	3.8	3.5	4.1	9.5	11.2	13.9	14.2	2.1	1.3	NA
9-20	4.2	4.0	2.5	2.5	4.0	2.1	2.2	2.0	3.0	5.9	6.3	5.6	7.3	2.7	2.0	1.7
9-23	2.1	3.5	3.6	3.9	4.1	4.3	4.3	4.5	2.6	NA	NA	NA	NA	NA	NA	NA
9-28	2.3	2.6	2.0	2.6	3.0	3.3	2.6	2.5	3.5	5.8	8.6	7.7	7.1	2.5	1.6	2.3
9-30	3.7	NA	2.7	2.8	1.8	1.8	2.4	1.4	2.3	NA	NA	NA	NA	NA	NA	NA
10-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4	5.8	6.7	7.4	1.6	5.1	1.2
10-4	2.1	2.9	1.6	1.6	1.6	1.2	2.2	2.3	2.4	3.4	3.3	3.2	3.2	3.6	2.1	1.0
10-7	3.0	2.7	1.8	2.4	2.6	2.4	2.5	2.4	2.8	4.3	3.6	4.7	3.7	1.6	1.3	1.7
10-11	4.2	3.1	2.6	2.4	2.6	1.7	2.2	3.2	3.4	6.0	5.7	5.4	4.3	2.1	4.4	1.9
10-14	4.1	4.9	4.6	4.1	5.6	3.1	7.6	3.4	3.9	6.2	8.2	8.6	8.4	1.7	1.5	2.3

TABLE B-4. RESULTS OF GROUNDWATER DISSOLVED OXYGEN MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
10-18	3.9	3.8	1.0	1.6	1.7	1.7	1.9	2.8	3.2	14.6	13.0	13.0	10.1	1.9	2.3	2.1
10-21	4.6	NA	2.0	2.4	5.0	1.3	7.1	7.4	7.7	8.3	14.7	8.5	8.2	NA	NA	NA
10-23	2.1	3.5	3.6	3,9	4.1	4.3	4.3	4.5	2.6	NA	NA	NA	NA	NA	NA	NA
10-25	5.5	6.8	1.9	6.5	6.3	3.3	4.4	NA	4.5	19.0	19.3	19.4	15.5	4.7	5.4	2.0
10-28	5.0	7.5	3.0	2.7	7.5	2.8	3.2	NA	7.6	19.5	18.5	19.1	16.7	10.5	15.2	11.1
11-2	6.7	6.5	2.8	8.6	2.6	3.3	3.8	4.5	5.2	15.6	NA	17.4	14.3	1.6	2.7	2.0
11-4	5.7	5.9	6.8	3.8	2.7	2.9	3.6	4.3	3.8	18.5	19.9	NA	NA	2.5	5.3	2.0
11-8	5.5	7.6	2.5	3.8	5.0	2.0	2.1	5.0	4.1	16.5	31.3	24.6	8.9	3.3	2.4	3.0
11-11	5.4	6.2	3.6	2.5	3.0	2.5	1.2	5.4	2.4	10.4	10.8	11.0	9.6	2.4	3.4	2.6
11-18	3.8	NA	1.5	2.7	2.2	1.4	0.8	1.5	2.4	8.8	7.6	7.7	7.0	2.8	1.8	1.8
11-21	4.5	7.8	3.4	4.3	3.7	1.1	3.3	6.0	3.0	7.8	7.8	9.4	7.5	3.4	2.0	2.2
11-28	5.4	5.9	3.1	3.2	3.2	2.8	2.4	4.0	2.4	7.5	8.0	7.6	7.9	5.0	2.5	3.0
12-6	5.5	4.7	3.7	3.5	2.8	2.4	2.2	4.8	3.0	8.3	7.8	8.6	8.2	5.0	2.2	2.8
12-9	5.0	2.3	2.3	1.5	3.5	1.7	4.3	3.6	3.0	8.3	10.5	7.9	9.7	NA	NA	NA
12-12	6.8	9.1	3.1	3.4	2.7	2.2	2.2	4.4	4.4	18.0	12.0	11.2	12.1	8.1	1.7	1.7
12-16	4.9	6.1	3.8	3.6	1.8	1.2	1.7	4.6	3.9	11.7	13.4	12.8	12.8	NA	NA	NA
12-19	4.1	6.1	1.4	1.8	1.6	1.7	3.6	2.8	1.8	13.6	16.2	13.5	13.7	4.8	1.5	1.3
12-23	3.6	4.3	3.0	2.7	3.0	1.9	2.8	3.2	3.2	15.5	14.4	13.1	15.4	NA	NA	NA
12-26	6.1	5.2	3.9	4.0	3.3	3.0	5.0	4.7	3.9	18.2	16.7	14.7	14.2	8.3	2.4	2.5
12-30	4.4	8.8	3.7	2.5	3.0	2.2	3.1	3.3	3.5	22.0	18.9	17.7	19.1	NA	NA	NA
1-2	4.6	1.5	3.2	3.1	3.8	2.0	4.7	3.5	3.2	22.8	21.1	22.0	20.0	4.2	1.4	1.6
1-6	6.1	5.0	3.7	4.3	2.8	2.5	4.0	5.3	4.7	21.0	21.5	21.5	20.9	NA	NA	NA
1-9	6.6	5.7	5.3	6.0	4.9	3.6	3.7	5.5	5.3	NA	NA	NA	NA	6.5	3.4	2.9
1-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.2	26.0	23.4	20.5	NA	NA	NA
1-13	5.1	3.2	4.4	4.9	4.0	2.8	2.5	4.8	3.6	14.7	15.1	14.4	13.8	NA	NA	NA
1-16	5.3	7.9	2.2	2.8	3.0	3.6	3.3	5.5	5.2	15.6	15.4	13.8	13.1	4.3	2.1	2.5
1-20	5.6	4.7	3.8	2.6	4.9	2.3	3.0	4.9	2.7	12.0	11.9	10.4	11.1	NA	NA	NA
1-24	5.1	7.5	2.7	2.1	5.5	1.8	3.8	6.7	3.2	66.6	69.0	52.0	61.0	7.0	3.1	2.9
1-28	NA	NA	NA	NA	NA	NA	NA	NA	NA	60.0	62.0	62.0	60.0	NA	NA	NA
1-31	5.0	6.0	5.0	4.0	5.0	2.0	3.0	5.0	3.0	32.0	36.0	30.0	32.0	8.0	3.0	3.0
2-4	6.0	6.0	5.0	5.0	5.0	2.0	3.0	5.0	3.0	21.0	25.0	29.0	30.0	NA	NA	NA
2-7	5.0	7.0	3.0	2.0	5.0	2.0	3.0	6.0	3.0	20.0	23.0	30.0	30.0	8.0	2.0	2.0
2-11	5.1	5.2	3.1	2.4	5.5	1.9	3.7	6.7	3.4	8.1	16.0	16.0	18.0	NA	NA	NA
2-17	5.2	5.2	3.5	2.2	5.6	2.1	3.8	6.4	3.7	8.0	12.0	12.0	13.0	8.6	2.1	2.2

TABLE B-4. RESULTS OF GROUNDWATER DISSOLVED OXYGEN MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC

Notes:

NA - Not Available
c - Indicates that the reading was off scale
Peroxide addition was begun 06-26-85
Dissolved oxygen readings taken using meter

TABLE B-5. RESULTS OF GROUNDWATER CARBON DIOXIDE MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
11-13	94.0	94.0	89.0	78.0	68.0	72.0	60.0	78.0	131.0	NA	NA	NA	NA	NA	NA	NA
11-15	100.0	120.0	90.0	80.0	90.0	100.0	100.0	90.0	185.0	240.0 a	180.0 a	440.0 a	160.0 a	30.0	157.0	127.0
11-18	142.0	150.0	116.0	90.0	122.0	90.0	90.0	100.0	172.0	NA	NA	NA	NA	NA	NA	NA
11-21	63.0	107.0	116.0	90.0	96.0	110.0	107.0	100.0	191.0	18.0	19.0	16.0	7.5	NA	NA	NA
11-28	138.0	130.0	110.0	85.0	88.0	88.0	103.0	100.0	210.0	28.0	23.0	30.0	23.0	8.0	150.0	118.0
12-06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12-12	125.0	75.0	125.0	90.0	110.0	115.0	100.0	85.0	180.0	25.0	25.0	25.0	25.0	10.0	193.0	147.0
12-16	140.0	85.0	135.0	110.0	135.0	125.0	105.0	75.0	190.0	45.0	40.0	45.0	30.0	NA	NA	NA
12-19	120.0	40.0	120.0	90.0	110.0	120.0	100.0	100.0	195.0	25.0	25.0	25.0	30.0	5.0	120.0	115.0
12-23	123.0	100.0	123.0	84.0	117.0	100.0	92.0	91.0	172.0	40.0	34.0	36.0	26.0	NA	NA	NA
12-26	119.0	74.0	81.0	90.0	121.0	95.0	108.0	111.0	190.0	27.0	27.0	25.0	24.0	10.0	173.0	134.0
12-30	122.0	71.0	193.0	121.0	126.0	94.0	88.0	60.0	181.0	28.0	26.0	28.0	26.0	NA	NA	NA
1-2	129.0	86.0	119.0	87.0	115.0	100.0	88.0	91.0	194.0	37.0	33.0	40.0	40.0	18.0	196.0	161.0
1-6	115.0	95.0	129.0	97.0	133.0	112.0	93.0	93.0	216.0	38.0	36.0	36.0	30.0	NA	NA	NA
1-9	100.0	78.0	118.0	78.0	127.0	81.0	94.0	87.0	176.0	NA	NA	NA	NA	12.0	138.0	120.0
1-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.0	23.0	24.0	21.0	NA	NA	NA
1-13	105.0	112.0	88.0	65.0	121.0	120.0	120.0	100.0	165.0	34.0	37.0	31.0	33.0	NA	NA	NA
1-16	128.0	50.0	113.0	95.0	115.0	92.0	79.0	100.0	150.0	36.0	33.0	31.0	34.0	41.0	120.0	136.0
1-20	125.0	100.0	125.0	100.0	120.0	110.0	110.0	100.0	220.0	35.0	40.0	40.0	40.0	NA	NA	NA
1-24	135.0	75.0	150.0	100.0	125.0	100.0	100.0	75.0	150.0	20.0	10.0	15.0	10.0	30.0	160.0	140.0
1-28	120.0	145.0	130.0	100.0	120.0	105.0	85.0	105.0	160.0	20.0	20.0	20.0	15.0	NA	NA	NA
1-31	128.0	40.0	143.0	87.0	89.0	90.0	81.0	75.0	150.0	15.0	17.0	23.0	12.0	39.0	153.0	145.0
2-4	121.0	40.0	138.0	80.0	92.0	85.0	80.0	78.0	150.0	16.0	20.0	22.0	12.0	NA	NA	NA
2-7	135.0	65.0	125.0	90.0	73.0	81.0	102.0	71.0	141.0	14.0	13.0	13.0	10.0	40.0	115.0	131.0
2-11	130.0	70.0	130.0	90.0	74.0	85.0	109.0	76.0	150.0	50.0	20.0	20.0	20.0	NA	NA	NA
2-17	132.0	71.0	129.0	80.0	79.0	88.0	121.0	78.0	140.0	68.0	20.0	20.0	20.0	50.0	130.0	124.0

Notes:

NA - Not Available

a - Samples taken right after well redevelopment

Analyses performed with Lamotte titrimetric kit 7297-DR

TABLE B-6. RESULTS OF GROUNDWATER AMMONIUM-NITROGEN MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA
6-10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	8.0	10.0	50.0	125.0	125.0	< 1.0	< 1.5	< 1.0
6-12	< 1.0	< 2.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	15.0	250.0	75.0	62.0	62.0	< 1.0	< 1.0	< 1.0
6-14	2.5	< 1.0	6.0	2.5	1.5	8.0	5.0	2.5	20.0	150.0	125.0	125.0	125.0	< 1.0	< 1.0	< 1.0
6-17	< 1.0	< 1.0	2.5	< 1.0	1.5	< 1.0	1.5	2.5	35.0	162.0	225.0	175.0	175.0	< 1.0	< 1.0	< 1.0
6-19	< 1.0	< 1.0	2.5	< 1.0	< 1.0	< 1.0	< 1.0	4.5	62.0	250.0	250.0	250.0	250.0	< 1.0	< 1.0	< 1.0
6-20	< 1.0	< 1.0	12.5	< 1.0	< 1.0	< 1.0	< 1.0	2.5	62.0	250.0	250.0	450.0	450.0	< 1.0	< 1.0	< 1.0
6-26	4.0	< 1.0	2.5	< 1.0	< 1.0	< 1.0	< 1.0	2.5	112.0	400.0	250.0	400.0	250.0	< 1.0	< 1.0	< 1.0
6-28	4.5	0.0	2.0	< 1.0	< 1.0	< 1.0	< 1.0	2.5	100.0	3000.0	4500.0	2500.0	3000.0	0.0	0.0	0.0
7-1	1.5	0.0	< 1.0	0.0	0.0	0.0	< 1.0	2.5	10.0	< 1.0	< 1.0	200.0	100.0	< 1.0	< 1.0	< 1.0
7-5	1.0	< 1.0	< 1.0	0.0	0.0	0.0	0.0	3.0	80.0	800.0	1500.0	1500.0	500.0	< 1.0	1.0	NA
7-9	1.0	< 1.0	< 1.0	0.0	0.0	0.0	< 1.0	4.0	60.0	2500.0	NA	2500.0	2500.0	< 1.0	< 1.0	NA
7-12	1.0	0.0	< 1.0	0.0	0.0	0.0	< 1.0	2.0	100.0	1500.0	1500.0	1500.0	NA	0.0	0.0	NA
7-15	1.0	0.0	7.0	0.0	< 1.0	0.0	1.0	7.0	90.0	NA	NA	NA	NA	0.0	0.0	NA
7-17	< 1.0	0.0	4.0	0.0	1.5	0.0	< 1.0	4.5	80.0	NA	NA	NA	NA	NA	NA	NA
7-19	4.0	0.0	3.0	0.0	1.0	0.0	< 1.0	0.0	60.0	2000.0	2000.0	2000.0	2000.0	0.0	0.0	< 1.0
7-23	1.0	0.0	2.0	0.0	1.0	0.0	0.0	4.0	80.0	NA	NA	NA	NA	NA	NA	NA
7-25	2.0	1.0	2.0	0.0	1.0	0.0	< 1.0	5.0	60.0	2000.0	2000.0	2000.0	2000.0	< 1.0	< 1.0	NA
7-30	1.0	0.0	3.0	0.0	< 1.0	0.0	< 1.0	4.0	60.0	2000.0	2000.0	2000.0	2000.0	0.0	0.0	NA
8-3	1.0	0.0	3.0	0.0	< 1.0	0.0	1.0	4.0	60.0	2000.0	2000.0	2000.0	2000.0	0.0	0.0	0.0
8-6	2.0	1.0	2.0	0.0	2.0	0.0	< 1.0	5.0	60.0	2000.0	2000.0	2000.0	2000.0	0.0	0.0	NA
8-9	2.5	< 1.0	1.0	0.0	1.0	0.0	< 1.0	6.0	80.0	1500.0	2225.0	2225.0	2500.0	NA	< 1.0	NA
8-14	3.5	2.0	1.0	0.0	5.5	< 1.0	2.0	2.0	90.0	NA	NA	NA	NA	NA	NA	NA
8-16	4.5	2.0	< 1.0	0.0	5.0	1.0	< 1.0	12.0	50.0	2000.0	2000.0	2000.0	2000.0	< 1.0	< 1.0	< 1.0
8-19	5.0	1.5	1.0	0.0	20.0	1.0	1.0	16.0	80.0	NA	NA	NA	NA	NA	NA	NA
8-21	4.5	1.5	< 1.0	0.0	28.0	< 1.0	< 1.0	10.0	80.0	NA	NA	NA	NA	NA	NA	NA
8-24	8.0	2.5	1.0	0.0	27.0	1.0	1.0	10.0	60.0	2000.0	2250.0	2000.0	2000.0	0.0	< 1.0	< 1.0
8-27	7.5	2.0	< 1.0	0.0	20.0	1.0	1.0	12.5	80.0	NA	NA	NA	NA	NA	NA	NA
8-30	5.0	1.0	< 1.0	0.0	20.0	2.0	1.0	10.0	60.0	2000.0	1000.0	2000.0	1000.0	0.0	1.0	NA
9-3	5.0	2.5	< 1.0	< 1.0	15.0	2.0	1.0	12.5	80.0	NA	NA	NA	NA	NA	NA	NA
9-6	4.5	2.5	< 1.0	< 1.0	12.5	< 1.0	< 1.0	5.0	150.0	100.0	100.0	125.0	125.0	< 1.0	1.5	< 1.0
9-12	7.5	6.0	0.0	0.0	12.5	< 1.0	0.0	5.5	125.0	125.0	150.0	125.0	125.0	NA	NA	NA
9-16	5.5	6.0	0.0	0.0	7.5	< 1.0	< 1.0	5.0	62.5	NA	NA	NA	NA	NA	NA	NA
9-18	7.0	7.0	0.0	0.0	6.0	< 1.0	< 1.0	3.0	90.0	NA	NA	NA	NA	NA	NA	NA

TABLE B-6. RESULTS OF GROUNDWATER AMMONIUM-NITROGEN MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
9-20	6.5	12.5	< 1.0	0.0	8.0	0.0	< 1.0	3.5	90.0	30.0	25.0	25.0	22.5	NA	NA	NA
9-23	6.0	10.0	< 1.0	0.0	12.5	< 1.0	< 1.0	3.0	200.0	NA	NA	NA	NA	NA	NA	NA
9-25	6.5	20.0	< 1.0	0.0	7.5	1.0	< 1.0	2.5	160.0	NA	NA	NA	NA	NA	NA	NA
9-28	6.0	7.5	< 1.0	< 1.0	7.5	1.0	< 1.0	2.0	112.5	270.0	360.0	50.0	60.0	NA	NA	NA
9-30	5.0	0.0	1.5	0.0	7.5	< 1.0	< 1.0	12.0	150.0	NA	NA	NA	NA	NA	NA	NA
10-2	6.0	15.0	1.0	0.0	7.5	< 1.0	< 1.0	3.0	150.0	NA	NA	NA	NA	NA	NA	NA
10-4	7.5	15.0	< 5.0	< 5.0	7.5	< 5.0	< 5.0	5.0	100.0	125.0	200.0	37.5	37.5	1.5	5.0	0.0
10-7	0.0	22.5	0.0	0.0	10.0	0.0	0.0	0.0	100.0	NA	NA	NA	NA	NA	NA	NA
10-11	10.0	30.0	< 1.0	8.0	< 1.0	1.0	1.0	12.5	50.0	350.0	320.0	120.0	140.0	NA	NA	NA
10-14	15.0	60.0	0.5	0.0	25.0	0.0	0.0	20.0	150.0	NA	NA	NA	NA	NA	NA	NA
10-16	15.0	60.0	0.5	0.0	15.0	0.0	0.0	25.0	200.0	NA	NA	NA	NA	NA	NA	NA
10-18	12.0	60.0	< 1.0	< 1.0	5.0	0.0	0.0	15.0	200.0	75.0	400.0	400.0	1000.0	NA	NA	NA
10-21	20.0	70.0	< 1.0	0.0	5.0	< 1.0	5.0	30.0	150.0	NA	NA	NA	NA	NA	NA	NA
10-23	NA	45.0	0.5	0.0	10.0	0.0	8.0	75.0	280.0	NA	NA	NA	NA	NA	NA	NA
10-25	20.0	30.0	1.0	0.0	2.5	0.0	3.0	NA	120.0	225.0	75.0	100.0	75.0	> 0.0	2.0	> 0.0
10-28	10.0	30.0	0.5	0.0	5.0	0.0	0.5	0.0	300.0	NA	NA	NA	NA	NA	NA	NA
11-1	12.5	4.0	0.5	0.0	5.0	0.0	1.5	12.5	120.0	3500.0	3500.0	800.0	100.0	NA	NA	NA
11-4	15.0	20.0	0.5	2.5	5.0	0.0	1.0	0.0	180.0	NA	NA	NA	NA	NA	NA	NA
11-6	15.0	20.0	0.0	0.0	5.0	0.0	1.5	15.0	120.0	NA	NA	NA	NA	NA	NA	NA
11-8	25.0	30.0	1.0	0.0	1.0	> 0.0	1.0	0.5	120.0	50.0	100.0	45.0	30.0	NA	NA	NA
11-11	8.0	20.0	1.0	0.0	5.0	0.0	1.0	2.0	100.0	NA	NA	NA	NA	NA	NA	NA
11-13	10.0	25.0	15.0	0.0	7.5	0.0	1.0	5.0	125.0	NA	NA	NA	NA	NA	NA	NA
11-15	7.5	15.0	1.0	0.0	4.0	0.0	0.5	2.0	50.0	300.0	250.0	800.0	250.0	NA	NA	NA
11-18	10.0	NA	1.0	0.0	14.0	1.0	1.0	7.0	50.0	NA	NA	NA	NA	NA	NA	NA
11-21	9.0	20.0	3.0	0.0	9.0	0.0	0.0	2.0	80.0	3.0	9.0	9.0	6.5	NA	NA	NA
11-28	10.0	25.0	2.5	0.0	10.0	0.0	0.0	3.5	90.0	4.5	5.0	2.5	1.0	0.0	25.0	0.0
12-3	9.0	22.5	1.5	0.0	5.0	0.0	1.0	2.5	90.0	NA	NA	NA	NA	NA	NA	NA
12-6	9.0	25.0	2.5	0.0	5.0	0.0	1.0	2.5	90.0	50.0	50.0	50.0	5.0	NA	NA	NA
12-9	9.0	22.5	0.5	0.0	11.0	> 0.0	0.5	2.5	80.0	NA	NA	NA	NA	NA	NA	NA
12-12	8.0	20.0	2.0	0.0	22.5	> 0.0	0.5	2.0	70.0	10.0	10.0	10.0	10.0	0.0	10.0	> 0.0
12-16	12.5	22.5	2.0	0.0	12.5	> 0.0	0.5	1.0	80.0	NA	NA	NA	NA	NA	NA	NA
12-19	10.0	15.0	1.5	0.0	12.5	1.0	1.5	6.5	65.0	15.0	15.0	12.5	10.0	NA	NA	NA
12-23	9.0	15.0	2.5	0.0	1.0	0.0	0.0	2.5	50.0	NA	NA	NA	NA	NA	NA	NA
12-26	6.0	12.5	2.5	0.0	8.0	0.0	0.5	2.5	50.0	12.5	12.5	12.5	12.5	0.0	12.5	0.0

TABLE B-6. RESULTS OF GROUNDWATER AMMONIUM-NITROGEN MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
12-30	6.0	12.5	2.5	0.0	9.0	0.0	0.0	2.5	50.0	NA	NA	NA	NA	NA	NA	NA
1-2	8.0	15.0	2.5	0.0	8.0	0.0	0.0	4.5	70.0	32.5	30.0	40.0	40.0	0.0	12.5	0.0
1-6	9.0	12.5	5.0	0.0	12.0	0.0	0.0	2.5	50.0	NA	NA	NA	NA	NA	NA	NA
1-9	7.0	15.0	1.5	0.0	12.0	0.0	0.0	1.0	50.0	NA	NA	NA	NA	0.0	12.5	0.0
1-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.0	15.0	15.0	12.5	NA	NA	NA
1-13	10.0	15.0	1.0	0.0	10.0	0.0	0.0	3.0	40.0	NA	NA	NA	NA	NA	NA	NA
1-16	6.0	12.5	0.0	0.0	5.0	0.0	0.0	0.0	40.0	125.0 *	145.0 *	100.0 *	85.0 *	NA	NA	NA
1-20	10.0	20.0	3.0	0.0	8.0	< 1.0	< 1.0	3.0	50.0	NA	NA	NA	NA	NA	NA	NA
1-24	12.0	22.5	2.5	0.0	8.0	0.0	< 1.0	1.0	60.0	10.0	15.0	15.0	12.5	NA	NA	NA
1-28	10.0	30.0	3.0	0.0	8.0	0.0	1.0	2.0	60.0	NA	NA	NA	NA	NA	NA	NA
1-31	10.0	20.0	3.0	0.0	8.0	0.0	1.0	1.0	60.0	5.0	5.0	15.0	5.0	NA	NA	NA
2-4	10.0	30.0	4.0	0.0	10.0	0.0	0.0	2.0	50.0	NA	NA	NA	NA	NA	NA	NA
2-7	10.0	25.0	3.0	0.0	2.0	< 1.0	1.0	1.0	60.0	5.0	5.0	5.0	3.0	0.0	< 1.0	< 1.0
2-11	10.0	30.0	3.0	0.0	8.0	0.0	< 1.0	2.0	55.0	6.0	5.0	5.0	4.0	NA	NA	NA
2-17	10.0	30.0	3.0	0.0	8.0	0.0	< 1.0	2.0	60.0	6.0	5.0	5.0	3.0	0.0	< 1.0	< 1.0

Notes:

NA - Not Available
0.0 - None Detected
* - Value questionable
Analyses performed with LaMotte colorimetric kit 4795

Nutrient addition begun 06-07-85
Peroxide addition begun 06-26-85

TABLE B-7. RESULTS OF GROUNDWATER PHOSPHATE MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA
6-10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	10.0	37.0	175.0	125.0	< 0.5	< 0.5	< 0.5
6-12	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	87.0	125.0	100.0	87.0	< 0.5	< 0.5	< 0.5
6-14	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.8	150.0	175.0	175.0	175.0	< 0.5	< 0.5	< 0.5
6-17	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.5	175.0	175.0	175.0	175.0	< 0.5	< 0.5	< 0.5
6-19	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.5	350.0	250.0	350.0	250.0	< 0.5	< 0.5	< 0.5
6-20	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	4.0	350.0	250.0	350.0	350.0	< 0.5	< 0.5	< 0.5
6-26	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.0	60.0	500.0	300.0	500.0	350.0	1.0	< 0.5	1.0
6-28	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	50.0	600.0	400.0	800.0	800.0	0.5	< 0.5	0.5
7-1	< 0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	< 0.5	350.0	300.0	10.0	< 0.5	0.5
7-5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	2000.0	2000.0	2500.0	600.0	< 0.5	< 0.5	NA
7-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	4000.0	NA	4000.0	4000.0	10.0	< 0.5	NA
7-12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0	3000.0	3000.0	3000.0	NA	< 0.5	NA	NA
7-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	60.0	NA	NA	NA	NA	< 0.5	0.0	NA
7-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	60.0	NA	NA	NA	NA	NA	NA	NA
7-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	60.0	2500.0	2500.0	2500.0	2500.0	<0.5	0.5	NA
7-23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	40.0	NA	NA	NA	NA	NA	NA	NA
7-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	< 1.0	30.0	2500.0	2500.0	2500.0	2500.0	1.0	< 1.0	NA
7-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	40.0	2000.0	2000.0	2000.0	2500.0	0.0	0.0	0.0
8-3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	40.0	500.0	500.0	500.0	500.0	0.0	0.0	0.0
8-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	20.0	5000.0	5000.0	5000.0	5000.0	< 0.5	< 0.5	< 0.5
8-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	60.0	1750.0	1750.0	2000.0	2000.0	0.5	0.0	NA
8-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	50.0	NA	NA	NA	NA	NA	NA	NA
8-16	0.0	0.0	0.0	0.0	< 0.5	0.0	0.0	10.0	60.0	5000.0	5000.0	5000.0	5000.0	2.0	0.0	< 0.5
8-19	0.5	0.0	0.0	0.0	0.5	0.0	0.0	12.0	50.0	NA	NA	NA	NA	NA	NA	NA
8 21	0.0	0.0	0.0	0.0	1.0	< 0.5	0.0	6.0	60.0	NA	NA	NA	NA	NA	NA	NA
8 24	0.0	0.0	0.0	0.0	1.0	0.0	0.0	10.0	40.0	3000.0	3500.0	3000.0	3000.0	0.0	0.0	0.0
8 27	0.0	0.0	0.0	0.0	0.5	0.0	0.0	10.0	60.0	NA	NA	NA	NA	NA	NA	NA
8 30	0.0	0.0	0.0	< 0.5	< 0.5	0.0	0.0	7.0	40.0	5000.0	4000.0	4000.0	4000.0	0.0	0.0	NA
9-3	0.0	0.0	0.0	0.0	< 0.5	0.0	0.0	6.0	60.0	NA	NA	NA	NA	NA	NA	NA
9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	20.0	20.0	20.0	100.0	100.0	NA	NA	NA
9 12	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.0	30.0	25.0	60.0	40.0	25.0	0.0	0.0	0.0
9 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	30.0	NA	NA	NA	NA	NA	NA	NA
9 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	55.0	NA	NA	NA	NA	NA	NA	NA

TABLE B-7. RESULTS OF GROUNDWATER PHOSPHATE MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
9-20	0.0	0.0	0.0	0.0	< 1.0	0.0	0.0	1.0	50.0	0.0	0.0	0.0	0.0	NA	NA	NA
9-23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	30.0	NA	NA	NA	NA	NA	NA	NA
9-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	40.0	NA	NA	NA	NA	NA	NA	NA
9-28	< 1.0	< 1.0	0.0	0.0	0.0	0.0	0.0	2.0	40.0	8.0	0.0	2.0	6.0	NA	NA	NA
9-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	35.0	NA	NA	NA	NA	NA	NA	NA
10-2	0.0	0.0	0.0	0.0	0.0	< 1.0	0.0	2.5	45.0	NA	NA	NA	NA	NA	NA	NA
10-4	0.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	40.0	200.0	400.0	15.0	32.5	1.0	0.0	0.0
10-7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	< 1.0	60.0	NA	NA	NA	NA	NA	NA	NA
10-11	> 0.0	0.0	0.0	0.0	> 0.0	0.0	0.0	3.5	35.0	700.0	700.0	250.0	100.0	NA	NA	NA
10-14	0.0	0.0	0.0	0.0	2.0	0.0	0.0	5.0	50.0	NA	NA	NA	NA	NA	NA	NA
10-16	0.0	0.0	0.0	0.0	1.0	0.0	0.0	6.0	60.0	NA	NA	NA	NA	NA	NA	NA
10-18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	50.0	0.0	0.0	0.0	0.0	NA	NA	NA
10-21	0.0	0.0	0.0	0.0	0.0	0.5	0.0	5.0	60.0	NA	NA	NA	NA	NA	NA	NA
10-23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	400.0	NA	NA	NA	NA	NA	NA	NA
10-25	> 0.0	> 0.0	0.0	0.0	> 0.0	0.0	4.0	NA	15.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
10-28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0	NA	NA	NA	NA	NA	NA	NA
11-1	0.0	0.0	0.0	0.0	> 0.0	0.0	0.0	4.0	80.0	300.0	300.0	400.0	300.0	NA	NA	NA
11-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	NA	NA	NA	NA	NA	NA	NA
11-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	80.0	NA	NA	NA	NA	NA	NA	NA
11-8	> 0.0	0.0	> 0.0	0.0	< 1.0	0.0	0.0	< 1.0	40.0	20.0	10.0	30.0	10.0	NA	NA	NA
11-11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	NA	NA	NA	NA	NA	NA	NA
11-13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	NA	NA	NA	NA	NA	NA	NA
11-15	> 0.0	> 0.0	> 0.0	> 0.0	> 0.0	> 0.0	> 0.0	> 0.0	25.0	400.0	350.0	1000.0	350.0	NA	NA	NA
11-18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	15.0	NA	NA	NA	NA	NA	NA	NA
11-21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	25.0	NA	NA	NA	NA	NA	NA	NA
12-12	0.0	0.0	0.0	0.0	1.0	0.0	0.0	> 0.0	25.0	NA	NA	NA	NA	NA	NA	NA
12-16	0.0	0.0	0.0	0.0	> 0.0	0.0	0.0	2.5	7.0	NA	NA	NA	NA	NA	NA	NA
12-19	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.5	30.0	7.5	7.5	3.8	0.0	NA	NA	NA
12-23	0.0	0.0	0.0	0.0	1.0	0.0	0.0	2.0	30.0	NA	NA	NA	NA	NA	NA	NA
12-26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	1.0	1.0	0.0	0.0	1.5	< 1.0	< 1.0
12-30	0.0	0.0	0.0	0.0	0.5	0.0	0.0	2.0	15.0	NA	NA	NA	NA	NA	NA	NA
1-2	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	30.0	12.5	12.5	5.0	12.5	NA	NA	NA
1-6	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.5	15.0	NA	NA	NA	NA	NA	NA	NA
1-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	12.5	NA	NA	NA	NA	1.0	0.0	0.0

TABLE B-7. RESULTS OF GROUNDWATER PHOSPHATE MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
1-13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	NA	NA	NA	NA	NA	NA	NA
1-16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	NA	NA	NA	NA	NA	NA	NA
1-20	0.5	0.5	0.5	1.0	2.5	< 0.5	0.0	1.0	40.0	NA	NA	NA	NA	NA	NA	NA
1 24	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	100.0	NA	NA	NA	NA	NA	NA	NA
1-28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0	2.0	20.0	NA	NA	NA	NA	NA	NA	NA
1-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	5.0	0.0	0.0	0.0	0.0	NA	NA	NA
2-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	10.0	NA	NA	NA	NA	NA	NA	NA
2-7	0.0	0.0	0.0	0.0	< 0.0	0.0	0.0	1.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.0	0.0	0.0	0.0	0.0	NA	NA	NA
2-17	0.0	0.0	0.0	0.0	< 0.0	0.0	0.0	1.0	5.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0

Notes:

NA - Not Available
0.0 - None Detected
Analyses performed with LaMotte colorimetric kit 4408
Nutrient addition began 06-07-85
Peroxide addition began 06-26-85

TABLE B-8. RESULTS OF GROUNDWATER CHLORIDE MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
6-5	68	44	40	28	32	30	36	40	48	40	36	40	56	24	32	NA
6-10	80	33	38	25	35	26	70	70	200	120	250	400	350	12	25	25
6-12	75	31	135	21	70	24	79	95	225	125	250	450	300	12	26	25
6-14	77	35	360	22	270	200	150	150	450	1000	1250	1300	1350	12	25	25
6-17	88	37	180	23	300	210	145	155	650	1150	1750	1500	1500	15	30	26
6-19	105	38	325	28	320	125	150	275	850	1950	2600	3800	2500	12	38	25
6-20	106	40	525	26	300	110	125	200	820	3000	3100	3100	3400	13	30	25
6-26	205	41	120	28	260	120	175	155	800	3000	3100	1700	1300	15	30	24
6-28	225	45	150	27	50	32	75	51	280	8500	2000	8000	6000	15	33	22
7-1	110	70	70	31	55	29	79	53	555	1300	1600	1500	1500	25	42	25
7-5	205	82	65	30	48	75	70	75	NA	3600	4000	6500	1500	24	70	NA
7-9	250	90	55	31	42	46	90	55	310	5600	NA	6500	5500	20	53	NA
7-12	220	85	47	27	43	44	73	45	700	75	70	82	NA	23	50	NA
7-15	255	155	60	31	110	39	70	100	1500	NA	NA	NA	NA	30	53	NA
7-17	260	150	290	50	180	52	112	100	1050	NA	NA	NA	NA	NA	NA	NA
7-19	275	235	275	125	195	115	140	125	700	5500	5500	5500	5500	20	30	NA
7-23	350	230	125	40	165	45	70	52	800	NA	NA	NA	NA	NA	NA	NA
7-25	NA	350	200	110	220	130	150	160	640	5000	5000	5000	5000	110	200	100
7-30	305	235	250	95	160	125	155	115	750	5000	5000	5000	5000	20	30	20
8-3	210	230	240	100	170	130	155	120	620	5000	5000	5000	5000	20	30	20
8-6	275	245	285	150	205	125	150	125	750	500	500	500	500	20	30	20
8-9	675	425	165	55	165	75	135	170	900	550	420	600	570	75	275	NA
8-14	875	650	150	100	475	245	275	350	700	NA	NA	NA	NA	NA	NA	NA
8-16	925	650	160	100	550	225	275	185	765	5500	6200	5200	6300	75	375	100
8-19	1100	705	185	120	825	165	205	160	980	NA	NA	NA	NA	NA	NA	NA
8-21	1150	685	200	115	550	225	180	125	1000	NA	NA	NA	NA	NA	NA	NA
8-24	1650	850	290	200	750	330	270	250	1030	1500	7500	1600	1800	150	400	180
8-27	1000	700	230	150	560	230	200	200	1000	NA	NA	NA	NA	NA	NA	NA
8-30	1220	770	200	120	550	230	160	150	810	8000	3000	3600	3400	100	470	NA
9-3	1100	750	200	130	600	250	190	190	830	NA	NA	NA	NA	NA	NA	NA
9-6	1050	850	240	130	480	170	200	160	330	1500	1600	1600	1500	15	250	32
9-12	930	730	230	120	280	130	140	140	550	NA	NA	NA	NA	NA	NA	NA
9-16	1500	890	200	140	90	110	170	130	630	NA	NA	NA	NA	NA	NA	NA
9-18	1880	1760	220	70	140	120	120	90	1180	NA	NA	NA	NA	NA	NA	NA

TABLE B-8. RESULTS OF GROUNDWATER CHLORIDE MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
9 20	800	840	200	40	124	32	60	50	505	150	143	155	150	NA	NA	NA
9 23	1000	900	124	28	128	34	48	54	518	NA	NA	NA	NA	NA	NA	NA
9 25	900	950	244	40	130	40	44	50	534	NA	NA	NA	NA	NA	NA	NA
9 28	830	860	284	27	140	59	39	35	630	NA	NA	NA	NA	NA	NA	NA
9 30	900	NA	50	170	170	120	70	230	670	NA	NA	NA	NA	NA	NA	NA
10 2	1200	950	220	50	120	70	100	80	730	NA	NA	NA	NA	NA	NA	NA
10 4	385	435	100	25	75	35	45	40	285	500	350	810	440	13	85	38
10 11	980	1100	534	36	515	70	60	114	640	NA	NA	NA	NA	NA	NA	NA
10 14	940	1175	250	120	435	80	70	170	875	NA	NA	NA	NA	NA	NA	NA
10 16	910	1290	250	105	340	60	135	215	1100	NA	NA	NA	NA	NA	NA	NA
10 18	1050	1300	400	300	220	120	280	300	580	750	1650	1400	2300	NA	NA	NA
10 21	700	1450	400	250	500	700	550	550	850	NA	NA	NA	NA	NA	NA	NA
10 23	NA	850	150	100	80	100	845	700	700	NA	NA	NA	NA	NA	NA	NA
10 25	500	370	110	35	60	75	285	NA	320	600	420	430	450	90	240	100
10 28	1500	935	220	85	125	80	320	NA	500	NA	NA	NA	NA	NA	NA	NA
11 1	910	560	320	110	130	100	290	150	390	6750	4100	800	425	NA	NA	NA
11 4	1250	1050	280	105	100	70	150	575	70	NA	NA	NA	NA	NA	NA	NA
11 6	2000	1250	125	65	45	35	75	85	200	NA	NA	NA	NA	NA	NA	NA
11 8	880	1120	220	125	125	100	140	110	500	440	500	420	400	NA	NA	NA
11 11	1120	880	320	100	125	80	140	100	640	NA	NA	NA	NA	NA	NA	NA
11 13	1510	1240	670	90	230	100	200	250	830	NA	NA	NA	NA	NA	NA	NA
11 15	230	225	175	15	32	12	27	20	115	280	240	620	240	NA	NA	NA
11 18	212	NA	116	11	68	13	18	34	86	NA	NA	NA	NA	NA	NA	NA
11 21	150	89	100	18	41	6	10	13	91	87	46	79	91	NA	NA	NA
11 28	127	120	49	11	40	8	7	18	72	56	44	20	16	3	90	7
12 3	250	190	62	11	32	13	23	23	72	NA	NA	NA	NA	NA	NA	NA
12 6	82	166	66	13	50	7	7	13	74	74	50	45	36	NA	NA	NA
12 9	362	480	215	36	272	35	57	60	350	NA	NA	NA	NA	NA	NA	NA
12 12	750	675	468	32	217	42	50	47	545	130	134	115	125	31	350	30
12 16	830	700	570	34	285	45	70	48	410	NA	NA	NA	NA	NA	NA	NA
12 19	395	395	295	43	225	60	65	88	215	132	141	100	140	NA	NA	NA
12 23	875	750	670	50	259	63	67	63	460	NA	NA	NA	NA	NA	NA	NA
12 26	880	570	660	41	230	62	66	65	440	129	126	111	110	35	282	41
12 30	805	630	590	44	322	45	75	59	450	NA	NA	NA	NA	NA	NA	NA

TABLE B-8. RESULTS OF GROUNDWATER CHLORIDE MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
1-2	750	620	585	37	300	68	67	86	500	172	170	188	187	37	310	43
1-6	750	630	565	34	348	47	77	76	480	NA	NA	NA	NA	NA	NA	NA
1-9	705	590	500	27	342	35	71	47	380	NA	NA	NA	NA	23	210	33
1-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	156	176	155	138	NA	NA	NA
1-13	740	550	500	28	258	30	59	67	560	NA	NA	NA	NA	NA	NA	NA
1-16	700	560	500	34	159	33	59	50	440	112	115	85	72	NA	NA	NA
1-20	750	635	680	37	420	57	58	79	460	NA	NA	NA	NA	NA	NA	NA
1-24	405	375	500	35	212	34	40	50	200	80	115	110	50	NA	NA	NA
1-28	735	650	640	33	220	34	50	48	500	NA	NA	NA	NA	NA	NA	NA
1-31	740	640	635	34	430	46	47	50	470	75	110	90	50	NA	NA	NA
2-4	400	360	490	35	205	35	42	50	190	NA	NA	NA	NA	NA	NA	NA
2-7	750	670	640	32	450	136	120	82	360	78	130	90	50	18	41	36
2-11	710	610	630	32	450	140	115	87	350	81	120	95	50	NA	NA	NA
2-17	720	650	670	30	460	150	115	90	370	80	110	100	70	22	52	46

Notes:

Na - Not Available
0.0 -None Detected
Analyses performed with LaMotte titrimetric kit 4503-DR
Nutrient addition began 06-07-85
Peroxide addition began 06-26-85

TABLE B-9. RESULTS OF GROUNDWATER HYDROGEN PEROXIDE MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
6-4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	NA
6-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-28	0	0	0	0	0	0	0	0	0	15000	7000	5000	10000	0	0	0
7-1	0	0	0	0	0	0	0	0	0	0	500	500	500	0	0	0
7-5	0	0	0	0	0	0	0	0	0	300	500	300	500	0	0	NA
7-9	0	0	0	0	0	0	0	0	0	0	NA	0	0	0	0	NA
7-12	0	0	0	0	0	0	0	0	0	0	0	0	NA	0	0	NA
7-15	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	0	0	NA
7-17	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	0
7-19	0	0	0	0	0	0	0	0	0	8000	8000	8000	8000	0	0	0
7-23	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
7-25	0	0	0	0	0	0	0	0	0	10000	10000	10000	10000	0	0	0
7-30	0	0	0	0	0	0	0	0	0	5000	5000	5000	5000	0	0	0
8-3	0	0	0	0	0	0	0	0	0	500	500	500	500	0	0	0
8-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
8-9	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	0	0	NA
8-16	0	0	0	0	0	0	0	0	0	160	140	130	160	0	0	0
8-19	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
8-21	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
8-24	0	0	0	0	0	0	0	0	0	400	240	320	400	0	0	0
8-27	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
8-30	0	0	0	0	0	0	0	0	0	500	500	500	500	0	0	NA
9-3	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
9-6	0	0	0	0	0	0	0	0	0	400	350	500	500	0	0	0
9-12	0	0	0	0	0	0	0	0	0	500	500	500	500	NA	NA	NA
9-16	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
9-18	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
9-20	0	0	0	0	0	0	0	0	0	50	50	50	50	NA	NA	NA
9-23	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
9-25	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
9-28	0	0	0	0	0	0	0	0	0	30	230	150	75	NA	NA	NA
9-30	0	NA	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
10-2	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
10-4	0	0	0	0	0	0	0	0	0	< 1	30	< 1	10	0	0	0

TABLE B-9. RESULTS OF GROUNDWATER HYDROGEN PEROXIDE MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
10-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10-11	0	0	0	0	0	0	0	0	0	10	5	0	0	NA	NA	NA
10-14	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
10-16	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
10-18	10	10	10	10	20	15	15	15	15	250	200	200	200	NA	NA	NA
10-21	0	0	0	0	0	0	0	0	0	100	125	125	100	NA	NA	NA
10-23	NA	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
10-25	0	0	0	0	0	0	0	NA	0	450	500	500	500	2	0	0
10-28	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
11-1	0	0	0	0	0	0	0	0	0	250	250	250	250	NA	NA	NA
11-4	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
11-6	0	0	0	0	0	0	0	NA	0	NA	NA	NA	NA	NA	NA	NA
11-8	0	0	0	0	0	0	0	0	0	1	5	2	0	NA	NA	NA
11-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11-13	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	NA	NA	NA	NA	NA	NA	NA
11-15	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	10	< 5	NA	NA	NA
11-18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11-21	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA
11-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-6	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA
12-12	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	175	145	175	165	NA	NA	NA
12-19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	175	175	215	195	NA	NA	NA
12-26	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	150	125	125	165	< 1	< 1	< 1
1-2	< 5	< 5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	195	190	210	210	NA	NA	NA
1-9	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA
1-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	275	305	280	285	NA	NA	NA
1-16	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	350	300	350	400	NA	NA	NA
1-24	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	700	400	500	500	NA	NA	NA
1-31	25	10	45	< 5	< 5	< 5	< 5	< 5	< 5	150	275	300	75	NA	NA	NA
2-4	25	10	45	< 5	< 5	< 5	< 5	< 5	< 5	NA	NA	NA	NA	NA	NA	NA
2-7	20	10	45	< 5	< 5	< 5	< 5	< 5	< 5	145	275	275	110	< 0	< 0	< 0
2-17	20	10	40	< 5	< 5	< 5	< 5	< 5	< 5	55	115	150	90	< 0	< 0	< 0

TABLE B-9. RESULTS OF GROUNDWATER HYDROGEN PEROXIDE MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC

Notes:

NA - Not Available
0 - None Detected
Analyses performed with LaMotte colorimetric kit 3515
Nutrient addition began 06-07-85
Peroxide addition began 06-25-85

TABLE B-10. RESULTS OF GROUNDWATER NITRATE-NITROGEN MONITORING (mg/l)

[illegible]	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5 28	4.4	4.4	4.4	22.0	0.0	4.4	4.4	0.0	4.4	6.6	4.4	0.0	4.4	17.6	8.8	NA
6 12	< 4.4	< 4.4	4.4	17.6	35.2	< 4.4	< 4.4	< 4.4	8.8	6.6	6.6	4.4	8.8	< 4.4	17.6	8.8
6 20	< 4.4	< 4.4	< 4.4	4.4	13.2	< 4.4	< 4.4	< 4.4	13.2	4.4	6.6	6.6	13.2	< 4.4	13.2	NA
7 5	0.0	0.0	13.2	30.8	13.2	13.2	0.0	0.0	< 4.4	< 4.4	0.0	< 4.4	0.0	< 4.4	17.6	NA
7 19	0.0	0.0	13.2	70.4	13.2	0.0	0.0	0.0	0.0	0.0	0.0	< 4.4	< 4.4	13.2	13.2	NA
7-27	0.0	0.0	11.0	8.8	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	< 4.4
8-3	0.0	0.0	11.0	11.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	< 4.4
8-16	4.4	0.0	13.2	141.0	13.2	0.0	0.0	0.0	0.0	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	8.8	8.8
8-24	6.6	0.0	79.2	35.2	8.8	0.0	0.0	0.0	0.0	4.4	4.4	< 4.4	4.4	0.0	8.8	8.8
9-6	13.2	0.0	0.0	26.4	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	6.6	6.6
9-12	8.8	0.0	8.8	44.0	8.8	0.0	0.0	0.0	< 4.4	0.0	0.0	0.0	0.0	NA	NA	NA
9-20	3.0	< 1.0	11.0	5.0	2.0	0.0	0.0	0.0	< 1.0	0.0	0.0	0.0	0.0	NA	NA	NA
9-28	< 1.0	0.0	5.0	10.0	2.0	0.0	0.0	0.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA
10-4	< 1.0	< 1.0	15.0	18.0	2.0	0.0	0.0	0.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.0	0.0	0.0
10-11	11.0	0.0	7.5	5.0	2.5	0.0	0.0	0.0	0.0	1.0	1.0	< 1.0	< 1.0	NA	NA	NA
10-18	3.0	1.0	12.0	10.0	3.0	0.0	0.0	0.0	< 1.0	0.0	0.0	0.0	0.0	NA	NA	NA
10-25	1.0	1.0	2.0	3.0	1.0	1.5	0.0	NA	0.5	4.0	10.0	10.0	10.0	0.0	0.0	0.0
11-1	0.0	1.1	6.6	13.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	NA
11-8	0.5	0.3	2.0	2.5	7.5	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	NA	NA	NA
11-15	1.0	0.5	< 0.3	2.5	0.5	0.0	0.0	0.0	0.0	3.0	2.0	1.0	1.5	NA	NA	NA
11-21	2.5	2.0	3.5	34.0	4.0	< 1.0	< 1.0	< 1.0	< 1.0	3.0	2.5	3.0	3.0	NA	NA	NA
11-28	< 1.0	1.0	11.0	18.0	7.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.0
12-6	6.0	3.0	14.0	32.0	3.0	< 1.0	< 1.0	< 1.0	2.5	1.0	2.5	2.0	5.0	NA	NA	NA
12-12	> 0.0	13.2	40.0	40.0	35.2	8.8	0.0	0.0	NA	> 0.0	> 0.0	> 0.0	> 0.0	> 0.0	17.6	12.0
12-19	7.0	7.0	0.0	22.0	10.0	0.0	0.0	0.0	1.5	NA	NA	NA	NA	NA	NA	NA
12-26	5.0	5.0	0.0	4.0	4.0	0.0	0.0	0.0	> 0.0	> 0.0	> 0.0	> 0.0	> 0.0	1.0	3.0	5.0
1-10	0.3	0.8	> 0.0	1.0	0.8	0.0	0.0	0.0	0.0	NA	NA	NA	NA	> 0.0	0.4	0.5
1-24	< 0.3	0.5	4.0	1.0	0.5	0.0	0.0	0.0	< 0.3	NA	NA	NA	NA	NA	NA	NA
2-7	0.0	0.5	5.0	2.0	0.5	0.0	0.0	0.0	0.0	NA	NA	NA	NA	1.0	3.0	3.0
2-17	0.0	0.5	5.0	0.5	0.5	0.0	0.0	0.0	0.0	NA	NA	NA	NA	0.5	3.0	3.0

Notes:

TABLE B-10. RESULTS OF GROUNDWATER NITRATE-NITROGEN MONITORING (mg/l) (Continued)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC

Notes:

NA - Not Available
0.0 -None Detected
Analyses performed with LaMotte colorimetric kit 3110/7485
Nutrient addition began 06-07-85

TABLE B-11. RESULTS OF GROUNDWATER SULFATE MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5-27	20	65	50	50	65	20	20	50	20	50	50	50	20	35	65	NA
6-12	35	80	10	65	50	50	65	10	50	10	10	10	10	35	35	NA
6-20	35	100	100	80	65	50	50	50	50	10	10	10	10	35	65	35
7-5	30	100	80	100	120	120	0	20	50	20	20	20	0	60	0	35
7-19	50	80	80	60	80	60	0	20	20	200	200	200	200	20	20	NA
7-27	20	80	50	20	50	20	50	50	20	20	20	20	0	20	20	20
8-3	20	80	50	20	50	50	50	50	0	20	20	20	0	20	20	20
9-11	30	70	60	40	90	30	20	40	50	40	60	0	0	30	140	60
9-12	30	70	70	60	120	60	60	30	80	10	> 200	0	0	NA	NA	NA
9-20	0	90	60	20	50	10	0	5	50	35	60	40	50	NA	NA	NA
9-28	< 1	90	70	70	80	30	30	60	30	40	50	0	90	NA	NA	NA
10-4	< 10	50	50	20	70	30	0	15	10	200	0	70	80	0	30	25
10-11	0	60	40	40	60	20	0	20	20	0	0	0	10	NA	NA	NA
10-18	0	65	10	10	10	30	0	10	10	10	0	0	0	NA	NA	NA
10-25	0	100	20	30	30	20	0	NA	10	30	40	30	30	0	30	15
11-1	20	30	0	50	60	100	30	180	10	1600	2000	0	10	NA	NA	NA
11-8	0	180	30	30	60	10	0	0	0	50	60	40	25	NA	NA	NA
11-15	0	100	60	80	80	50	0	0	0	0	0	0	0	0	100	10
11-21	10	70	35	30	65	0	35	0	10	35	30	30	30	NA	NA	NA
11-28	10	90	35	35	65	10	0	10	10	30	25	25	20	0	100	30
12-6	0	70	30	35	40	10	0	10	15	25	30	NA	NA	NA	NA	NA
12-12	0	90	30	30	300	20	0	0	20	30	30	50	40	NA	NA	NA
12-26	0	70	30	30	40	25	0	10	180	30	30	30	10	0	80	10
1-10	0	100	65	50	65	50	20	0	0	35	35	50	50	10	75	20
1-24	0	90	30	50	40	10	0	50	0	80	60	60	30	NA	NA	NA
2-7	0	80	20	50	40	10	0	50	0	60	60	60	30	0	70	70
2-17	0	90	30	60	40	20	0	50	0	60	60	60	30	0	60	60

Notes:

NA - Not Available

0 - None Detected

Analyses performed with LaMotte turbidimetric kit 7778

Nutrient addition started 06-07-85

TABLE B-12. RESULTS OF GROUNDWATER ACIDITY MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
6-4	68	44	48	44	48	60	52	52	56	48	28	56	52	32	92	NA
6-12	64	10	44	40	28	44	165	120	60	140	200	260	300	120	220	160
6-20	80	20	100	184	140	62	88	124	104	224	260	260	220	52	108	92
7-27	NA	NA	NA	NA	NA	NA	NA	NA	NA	240	250	230	240	NA	NA	NA
8-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	250	232	250	NA	NA	NA
9-8	78	56	88	112	116	96	94	96	256	72	68	186	134	64	142	124
9-20	130	155	116	106	110	90	110	80	260	75	64	74	64	NA	NA	NA
10-4	144	120	90	90	110	140	60	80	230	NA	NA	NA	NA	NA	NA	NA
10-18	24	58	20	20	20	20	20	20	72	50	170	92	180	NA	NA	NA
10-25	190	170	150	120	140	160	180	0	250	100	48	94	90	< 10	60	110
11-1	480	560	280	330	280	400	480	240	1040	10000	7400	2000	360	NA	NA	NA
11-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	180	118	400	140	NA	NA	NA
11-21	NA	NA	NA	NA	NA	NA	NA	NA	NA	48	46	60	44	NA	NA	NA
11-28	92	100	74	48	72	64	62	52	176	52	36	36	36	14	84	86
12-12	120	100	120	110	80	110	100	110	240	38	20	24	24	NA	NA	NA
12-26	120	90	86	56	72	60	58	56	196	40	32	28	28	14	94	88
1-10	56	56	61	48	52	36	26	40	76	40	28	28	28	12	66	100
1-24*	170	80	175	120	130	130	140	110	200	60	35	40	40	NA	NA	NA
2-7*	120	100	190	90	110	160	110	200	60	35	40	40	50	30	90	85
2-17*	115	100	185	90	120	160	110	210	70	45	60	40	40	50	90	90

Notes:

NA - Not Available

Analyses performed with LaMotte titrimetric kit 7604-DR

* - Phenolphthalein

Nutrient Addition Began 06-07-85

TABLE B-13. RESULTS OF GROUNDWATER ALKALINITY MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5-27	424	456	396	384	380	376	412	440	456	432	376	320	384	288	452	NA
6-12	408	500	500	430	540	520	520	600	520	580	580	600	520	500	600	580
6-20	580	420	460	480	500	500	540	580	500	680	580	620	520	400	560	580
7-5	415	420	400	340	350	384	370	292	410	4000	5000	3600	3600	290	430	NA
7-27	NA	NA	NA	NA	NA	NA	NA	NA	NA	1050	1150	1040	1100	NA	NA	NA
8-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1100	1050	1030	1050	NA	NA	NA
9-8	272	224	320	340	344	328	376	346	470	364	372	388	372	284	354	360
9-20	360	365	360	360	350	340	384	310	496	368	350	355	350	NA	NA	NA
10-4	304	300	384	380	360	388	200	358	460	360	395	350	350	150	440	400
10-18	400	420	520	440	440	460	480	500	520	420	660	600	580	NA	NA	NA
10-25	260	440	400	400	390	420	380	0	510	280	320	334	400	110	385	360
11-1	1440	720	1570	1550	1600	1640	1680	1600	2280	10800	7950	2400	1600	NA	NA	NA
11-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	480	486	908	352	NA	NA	NA
11-21	NA	NA	NA	NA	NA	NA	NA	NA	NA	516	444	600	560	NA	NA	NA
11-28	440	444	416	396	384	372	400	370	532	376	400	392	380	168	424	450
12-12	340	405	430	365	385	420	440	420	580	390	340	378	394	NA	NA	NA
12-26	400	362	380	378	390	372	382	380	386	400	392	396	388	236	400	452
1-10	364	352	348	360	364	352	360	356	520	368	368	384	376	116	410	410
1-24	492	392	480	450	400	400	460	430	710	370	430	400	400	NA	NA	NA
2-7	400	396	408	384	369	380	384	372	394	380	370	350	384	270	412	408
2-17	420	384	404	396	404	384	364	394	404	392	384	364	376	252	424	416

Notes:

NA - Not Available

Analyses performed with LaMotte titrimetric kit 4491-DR

Nutrient Addition Began 06-07-85

TABLE B-14. RESULTS OF GROUNDWATER HARDNESS MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5-28	276	264	280	296	308	312	292	260	276	260	248	256	272	236	204	NA
6-12	454	454	412	330	452	412	412	412	536	330	330	240	330	330	412	NA
6-20	432	30	400	332	400	336	372	380	464	NA	NA	NA	NA	NA	NA	NA
7-27	NA	NA	NA	NA	NA	NA	NA	NA	NA	1120	1250	1210	1210	NA	NA	NA
8-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1150	1210	1160	1230	NA	NA	NA
9-11	1600	1032	464	877	671	361	413	413	722	516	516	310	361	310	800	361
10-18	1290	2064	722	464	722	516	619	619	980	516	206	206	103	NA	NA	NA
10-25	2000	1240	600	420	400	700	1000	NA	400	180	400	400	400	100	250	400
11-1	4800	3860	2800	1520	1600	3600	3000	1800	1800	0	0	128	448	NA	NA	NA
11-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	104	48	480	100	NA	NA	NA
11-21	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	0	NA	NA	NA
11-28	1088	1040	820	416	488	352	446	464	600	0	0	240	180	84	800	116
12-12	< 200	NA	NA	200	NA	200	NA	NA	200	NA	NA	NA	NA	NA	NA	NA
12-26	1176	976	1160	528	720	384	472	408	624	NA	NA	NA	NA	256	340	276
1-10	960	928	800	352	736	312	448	304	544	NA	NA	NA	NA	240	480	416
1-24	NA	NA	NA	180	NA	200	200	NA	200	NA	NA	NA	NA	NA	NA	NA

Notes:

NA - Not Available

0 - None Detected

Analyses performed using LaMotte titrimetric kit 4482-DR

Nutrient addition began 06-07-85

TABLE B-15. RESULTS OF GROUNDWATER CHROMIUM MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
6-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	NA
6-12	0.00	0.00	0.00	0.15	<0.10	<0.10	<0.10	<0.10	<0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.10	0.30	0.30
6-20	<0.10	<0.10	<0.10	0.15	<0.10	<0.10	<0.10	<0.10	<0.10	NA	NA	NA	NA	NA	NA	NA
7-27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	NA	NA	NA	0.00	0.00	0.00
8-3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	NA	NA	NA	0.00	0.00	0.00
9-6	0.00	0.00	0.00	<0.10	0.00	0.00	0.00	0.00	0.00	NA	NA	NA	NA	0.00	0.00	0.30
10-4	0.00	0.00	0.00	0.15	<0.10	0.00	0.00	0.00	0.00	0.00	NA	NA	NA	0.00	0.30	0.30
10-25	0.00	0.00	0.00	0.10	0.00	0.00	0.00	NA	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30
11-28	0.00	0.00	0.00	0.00	>0.00	0.00	0.00	0.00	0.00	NA	NA	NA	NA	0.00	>0.00	0.40
12-26	0.00	0.00	0.00	>0.00	>0.00	0.00	0.00	0.00	0.00	NA	NA	NA	NA	0.00	>0.00	0.40
2-7	0.00	0.00	0.00	0.00	>0.00	0.00	0.00	0.00	0.00	NA	NA	NA	NA	0.00	>0.00	0.30
2-17	0.00	0.00	0.00	0.00	>0.00	0.00	0.00	0.00	0.00	NA	NA	NA	NA	0.00	>0.00	0.40

Notes:

NA - Not Available
0.00-None Detected
Analyses performed with LaMotte colorimetric kit 7678

TABLE B-16. RESULTS OF GROUNDWATER LEAD MONITORING (mg/l)

Date	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5-28	0.10	0.00	0.10	0.00	0.10	0.05	0.10	0.00	0.05	0.10	0.05	0.10	0.10	0.00	0.00	NA
7-5	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA
7-27	0.80	0.10	<0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA
8-3	0.80	0.10	<0.10	0.00	0.00	0.00	0.00	0.00	0.00	NA	NA	NA	NA	0.00	0.00	0.00
9-11	0.15	0.00	0.00	0.15	0.15	0.05	0.05	0.00	0.00	NA	NA	NA	NA	0.05	0.05	0.05
10-4	0.80	1.00	0.20	0.00	0.10	NA	0.00	0.02	0.05	0.10	NA	NA	NA	0.15	3.00	<0.10
10-25	>2.00	>2.00	0.10	0.05	0.00	0.00	0.15	NA	0.00	NA	NA	NA	NA	0.03	0.05	0.00
11-28	0.20	0.20	0.03	0.03	>0.00	0.03	0.00	0.00	0.03	NA	NA	NA	NA	0.00	>0.00	0.40
12-26	0.30	0.15	0.30	0.03	0.03	0.03	0.00	0.03	0.00	NA	NA	NA	NA	0.00	>0.00	0.40
2-7	0.30	0.30	0.30	0.03	0.03	0.03	0.00	0.03	0.00	NA	NA	NA	NA	0.03	0.15	0.00
2-17	0.30	0.30	0.30	0.03	0.03	0.03	0.00	0.03	0.00	NA	NA	NA	NA	0.03	>0.00	0.00

Notes:

NA - Not Available

0.00-None Detected

Analyses performed with LaMotte colorimetric kit 7662

APPENDIX C

GROUNDWATER LEVELS

TABLE C-1. GROUNDWATER LEVELS (in feet below ground surface)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5-17	21.1	21.4	21.3	21.2	20.3	20.9	20.6	20.1	20.8	NA	NA	NA	NA	NA	NA	NA
5-23	20.9	21.4	21.1	20.9	21.0	20.6	20.4	19.9	20.5	20.6	21.4	20.8	20.2	23.0	14.5	NA
5-30	21.1	21.4	21.4	21.2	21.3	21.0	20.7	20.1	20.7	20.8	21.1	21.1	20.4	14.8	23.3	NA
6-4/0900	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.4	0.8	9.8	18.3	13.7	23.5	NA
6-4/1200	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.9	10.5	12.7	18.9	NA	NA	NA
6-4/1730	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.9	9.8	13.8	18.7	13.7	23.1	NA
6-5/0830	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.4	9.1	16.1	19.2	14.1	23.1	NA
6-5/1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.4	0.0	13.7	19.2	14.2	23.0	NA
6-6/0830	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.8	18.7	10.4	18.1	12.6	23.0	NA
6-7/0800	18.6	23.1	20.5	18.1	18.8	18.1	19.0	17.7	18.3	17.7	0.0	10.7	17.5	12.2	20.4	NA
6-7/1400	NA	23.3	NA	NA	NA	NA	NA	NA	NA	17.7	13.5	9.1	17.5	NA	NA	NA
6-8/0830	NA	NA	NA	NA	NA	NA	NA	NA	NA	16.7	17.8	3.9	7.6	NA	NA	NA
6-10/0900	20.8	21.4	22.7	NA	NA	NA	20.1	18.8	24.4	17.4	0.0	7.4	0.0	NA	NA	NA
6-11/1000	NA	NA	NA	NA	NA	NA	NA	NA	20.2	8.0	8.7	7.4	8.6	NA	NA	NA
6-11/1200	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9	9.7	7.4	11.6	NA	NA	NA
6-11/1700	21.0	27.4	21.3	21.2	20.8	20.9	21.4	19.8	20.6	10.0	9.6	5.3	9.5	14.9	23.3	22.7
6-12/0800	23.0	22.0	21.5	21.4	21.3	21.2	21.4	20.0	20.4	5.4	9.6	2.3	5.6	15.0	23.5	22.6
6-12/1500	21.2	21.6	21.4	21.2	21.6	20.9	20.8	20.1	20.7	0.0	10.2	6.7	0.0	14.8	23.0	22.7
6-12/1600	21.2	21.7	21.5	21.4	21.5	21.1	21.1	20.2	20.8	2.9	3.4	3.6	0.0	15.4	23.8	22.7
6-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	NA	0.0	0.0	NA	NA	NA
6-16	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0	NA	NA	NA
6-17/0900	26.3	26.4	21.6	22.1	22.3	23.0	25.8	21.0	21.7	12.8	18.4	7.7	2.1	15.7	22.9	23.0
6-17/1600	NA	NA	NA	22.3	22.2	22.9	25.2	NA	21.6	10.9	13.6	3.8	0.0	16.7	22.9	22.9
6-18/0900	27.3	25.1	22.0	22.6	22.5	23.1	22.9	21.1	21.5	6.7	10.6	0.0	0.0	16.1	23.8	23.2
6-18/1600	24.1	24.5	22.2	22.4	22.2	23.0	21.5	21.0	21.5	2.3	9.6	0.0	0.0	16.3	23.9	23.0
6-19/0900	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.2	5.6	14.0	0.0	14.3	23.9	23.0
6-19/1700	26.5	22.7	23.6	22.0	22.3	21.6	23.7	20.9	21.5	9.7	4.5	12.6	4.6	14.3	23.9	23.1
6-20/0900	25.0	22.4	21.8	21.7	21.9	21.4	21.4	20.7	21.2	NA	5.2	8.4	1.5	13.9	23.8	23.1
6-21/0900	25.8	23.1	21.6	21.2	21.7	21.1	21.2	20.2	20.9	20.3	18.6	15.1	12.9	13.7	23.1	23.1
6-21/1800	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.5	18.0	10.7	11.9	13.9	23.6	22.9
6-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	NA	NA	NA	NA
6-23	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	NA	NA	NA	NA
6-24/0900	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	14.3	0.0	0.0	13.3	22.4	21.8
6-24/1700	24.6	20.2	20.0	18.5	19.2	18.6	19.9	19.7	19.2	NA	13.9	4.2	0.0	13.2	22.5	21.8

TABLE C-1. GROUNDWATER LEVELS (in feet below ground surface) (Continued)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
6-25	18.6	20.5	21.2	19.1	19.5	18.9	19.9	18.7	19.3	15.1	14.8	12.9	11.4	13.7	22.4	21.9
6-26/0800	19.9	20.2	20.2	20.0	20.0	20.9	20.6	19.2	19.7	4.0	6.3	0.0	3.4	14.0	22.8	21.9
6-26/1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	6.2	0.0	2.9	NA	NA	NA
6-27/0900	22.1	24.3	24.7	20.6	20.7	21.5	22.3	19.7	20.3	0.0	0.0	0.0	0.0	15.0	22.9	22.1
6-28/1230	20.7	20.9	21.0	20.8	20.8	20.4	20.3	19.8	20.4	0.0	0.0	0.0	0.0	15.1	23.1	22.3
6-28/1500	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0	NA	NA	NA
6-29/1200	20.8	20.8	21.1	20.9	21.0	20.5	20.4	20.0	20.5	4.1	4.6	9.5	9.4	15.5	23.0	22.3
6-29/1430	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	3.3	0.0	NA	NA	NA	NA
6-29/1830	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	6.6	NA	NA	NA
6-30/0800	21.1	20.8	21.2	21.1	21.1	20.6	20.4	20.1	20.7	0.0	1.0	0.0	0.0	15.5	23.0	22.3
7-1/0900	20.7	23.1	21.4	21.3	21.4	21.1	20.7	20.3	20.9	0.0	0.0	0.0	0.0	15.6	23.3	22.5
7-1/1730	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5	2.9	3.4	3.1	NA	NA	NA
7-1/1900	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0	NA	NA	NA
7-2/1430	21.2	21.4	20.9	21.4	21.4	20.9	20.7	20.3	21.0	3.9	4.7	5.2	4.9	15.7	23.4	22.6
7-4/1500	19.7	20.1	19.8	19.2	19.5	19.6	19.4	19.1	19.6	14.4	3.8	8.9	8.6	12.7	22.9	22.0
7-5/1000	19.1	19.1	19.3	18.8	19.0	18.8	18.8	18.6	19.2	17.9	2.7	7.7	7.4	13.6	22.8	21.9
7-8/1000	20.3	20.6	20.5	20.4	20.5	20.1	19.9	19.7	20.2	20.2	10.3	13.7	13.4	14.9	23.0	22.2
7-9/0930	20.5	20.8	20.9	20.8	20.7	20.5	20.1	20.0	20.4	20.5	3.8	15.1	14.8	15.0	23.1	22.1
7-10/1030	20.6	20.8	21.0	20.8	21.0	20.3	20.2	20.0	20.4	20.8	19.2	11.9	11.6	14.9	23.1	22.3
7-11/0945	20.6	20.8	21.1	20.7	21.8	20.7	20.3	19.9	20.5	20.7	21.2	14.0	13.7	14.4	23.1	22.4
7-12/0900	20.6	21.0	21.2	20.8	20.9	20.5	20.3	19.9	20.4	21.9	21.5	14.3	20.2	14.8	23.2	22.4
7-12/1530	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9	5.7	2.9	12.6	NA	NA	NA
7-13/0930	20.9	21.2	21.1	21.2	21.0	20.7	20.4	20.0	20.7	20.9	15.0	14.3	21.4	15.3	23.3	22.5
7-15/0930	21.1	21.3	21.5	21.3	21.5	21.0	20.8	20.2	20.9	21.4	10.7	13.5	20.6	15.9	22.5	22.6
7-16/1030	27.8	21.4	21.0	21.4	21.7	21.2	21.0	20.5	21.1	0.0	0.0	1.9	6.6	15.3	23.4	22.7
7-17/1000	21.5	21.6	21.6	21.6	21.8	21.2	21.0	20.5	21.1	15.2	10.9	13.2	21.1	16.0	23.5	22.7
7-18/1000	26.7	26.3	21.8	22.3	22.0	23.0	21.3	20.8	21.4	0.0	0.0	0.0	0.0	16.3	23.5	22.9
7-18/1200	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1	0.9	6.7	7.4	NA	NA	NA
7-18/1630	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7	2.7	9.5	14.2	NA	NA	NA
7-19/0930	21.4	22.1	21.6	21.3	21.8	21.1	21.1	20.7	21.1	13.7	9.2	13.1	20.1	15.7	23.8	22.9
7-19/1230	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	NA	NA	NA	NA	NA
7-19/1630	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	NA	NA	NA	NA	NA
7-20/1115	25.1	20.9	21.7	21.5	21.5	21.1	21.0	20.6	21.2	4.9	2.5	0.0	0.0	15.5	23.8	22.9
7-21/1330	21.5	20.9	21.8	21.7	21.8	21.3	21.2	20.7	21.2	9.1	6.0	12.5	17.0	15.8	23.8	22.9

TABLE C-1. GROUNDWATER LEVELS (in feet below ground surface) (Continued)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
7-22/1100	26.1	24.2	21.9	21.6	22.0	21.5	21.3	20.8	21.3	0.0	0.0	10.2	11.3	16.1	23.9	22.9
7-23/1000	21.6	20.9	22.1	21.9	22.0	21.3	21.3	20.8	21.5	5.7	5.3	12.9	21.4	16.4	23.9	22.9
7-24/1030	21.7	25.2	22.1	22.0	22.1	21.6	21.4	21.0	21.5	4.7	3.6	9.9	0.0	16.5	23.0	23.7
7-25/1330	21.9	22.6	22.1	22.1	22.1	21.8	21.6	21.1	21.6	8.8	8.2	14.0	14.6	16.6	23.9	22.9
7-26/1025	22.7	23.5	22.5	22.2	22.8	21.9	22.1	21.5	21.9	18.8	4.7	13.7	21.7	17.0	24.2	23.2
7-26/1300	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	NA	NA	NA	NA	NA
7-27/1400	22.6	22.0	22.4	22.0	22.7	21.9	22.2	21.5	21.9	18.7	11.8	17.2	18.1	16.1	24.2	23.2
7-27/2030	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	NA	NA	NA	NA
7-28/1400	22.7	21.9	22.4	22.2	22.7	21.7	22.0	21.4	21.9	18.7	4.6	13.7	21.7	17.0	24.2	23.2
7-29/0830	23.3	23.6	22.6	22.4	22.6	22.1	22.0	21.5	21.9	19.8	3.3	13.9	21.7	17.0	24.2	23.2
7-30/0700	24.4	21.9	21.6	23.2	21.7	22.8	22.7	22.6	22.3	21.7	9.4	13.0	21.6	17.3	24.2	23.5
7-31/0730	22.4	21.9	21.7	23.1	21.6	22.8	22.7	22.6	22.3	21.7	9.4	13.0	21.7	17.3	24.2	23.5
8-1/0830	23.1	23.6	22.9	21.2	23.2	22.4	22.3	22.5	23.0	13.0	13.6	16.4	22.1	17.3	24.4	23.7
8-2/0800	22.1	22.2	22.6	22.1	22.0	22.1	21.7	21.3	21.8	17.9	12.2	17.3	17.9	16.1	24.2	24.5
8-3/0900	22.1	22.2	22.5	22.0	22.1	22.1	21.7	21.2	21.7	18.8	11.8	17.2	18.0	16.1	24.2	23.6
8-4/1000	22.2	22.5	22.5	22.4	22.3	21.8	22.2	21.5	22.0	11.0	13.2	16.9	18.5	16.4	24.7	23.4
8-5/1000	22.3	22.6	22.5	22.3	22.4	22.0	21.9	21.4	21.9	16.3	12.6	16.9	22.0	16.4	24.7	23.5
8-6/1400	22.3	22.5	22.6	22.2	22.6	22.3	21.9	21.4	22.1	21.0	9.2	19.4	21.7	16.6	24.0	23.3
8-7/1310	22.3	22.5	22.5	22.3	22.5	22.2	21.9	21.4	22.0	20.9	9.1	19.6	21.6	16.6	24.0	23.3
8-8/1100	22.6	22.5	22.7	22.6	22.6	22.4	22.0	21.4	22.0	9.3	6.7	13.9	20.8	16.8	24.2	23.3
8-9/1230	22.5	22.5	22.6	21.5	22.6	22.3	22.0	21.4	22.0	11.9	6.9	12.8	13.4	16.9	24.3	23.4
8-10/1430	22.5	22.6	22.6	22.5	22.5	22.2	22.3	21.4	22.0	0.0	0.0	7.9	8.9	17.0	24.3	23.4
8-11/0930	22.6	22.7	22.9	22.7	22.8	22.5	22.3	21.7	22.2	7.5	9.4	9.5	7.5	17.3	24.2	24.4
8-12/0900	22.7	22.8	22.9	22.8	22.8	22.5	22.4	21.7	22.2	11.4	10.0	15.4	18.8	17.3	24.2	23.4
8-13/1030	28.9	22.8	25.0	22.8	23.2	22.5	25.4	21.9	22.6	6.6	5.3	6.5	3.3	17.3	24.2	23.4
8-14/0930	28.9	26.7	23.0	22.8	23.0	22.5	22.4	21.9	22.4	11.6	9.3	8.2	1.8	17.5	24.3	23.4
8-15/0830	27.9	22.7	23.0	23.0	23.0	22.7	22.5	22.0	22.6	0.0	0.0	8.7	0.0	17.5	24.3	23.4
8-16/0900	22.9	22.8	23.0	22.8	23.0	22.5	22.4	21.8	22.5	7.4	6.7	5.9	13.4	17.3	24.3	23.4
8-17/0900	22.9	22.8	23.1	22.8	23.0	22.6	22.5	22.1	22.6	6.5	5.8	0.0	0.0	17.4	24.3	23.4
8-18/1000	22.9	22.8	23.1	23.0	23.1	22.9	22.6	22.1	22.6	0.0	1.8	1.7	0.0	17.4	24.3	23.4
8-19/1130	22.9	22.9	22.2	23.1	23.1	22.8	22.6	22.1	22.6	13.4	12.1	NA	NA	17.8	24.3	23.5
8-20/1630	27.9	22.8	23.5	23.2	23.1	22.9	22.8	22.1	22.6	14.2	0.0	8.6	0.0	17.9	24.3	23.4
8-21/1100	22.9	22.9	23.2	23.0	23.0	22.8	22.6	22.1	22.6	19.1	3.9	9.9	8.1	17.8	24.3	23.5
8-22/0930	27.0	26.6	23.2	23.3	23.3	22.9	22.8	22.2	22.7	0.0	5.7	5.3	0.0	17.9	23.5	24.2

TABLE C-1. GROUNDWATER LEVELS (in feet below ground surface) (Continued)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
8-23/1830	23.2	23.2	NA	NA	23.2	23.0	22.8	22.2	22.7	6.7	11.2	13.8	11.4	17.3	24.3	23.4
8-24/1200	23.0	23.3	23.2	23.0	23.4	22.9	22.8	22.2	22.7	5.5	0.0	0.0	0.0	17.3	24.3	23.4
8-25/0900	2.9	22.8	29.0	22.8	22.9	22.8	22.6	22.1	22.6	11.7	10.2	12.9	11.7	17.3	24.3	23.4
8-27/1200	22.9	22.9	23.0	22.9	23.0	22.7	22.5	22.1	22.6	12.5	11.8	15.5	15.2	16.0	24.3	23.4
8-28/1000	22.9	22.9	23.0	22.8	23.0	22.6	22.5	22.1	22.6	NA	NA	NA	NA	16.2	24.3	23.4
8-29/1100	22.9	22.9	23.1	22.8	23.0	22.6	22.5	22.0	22.6	NA	NA	NA	NA	16.6	24.3	23.4
8-30/1200	22.9	27.3	23.0	23.0	23.0	22.7	22.4	21.9	22.5	4.9	0.0	0.0	0.0	14.9	24.2	23.4
8-31/1000	22.9	22.8	23.0	22.8	23.0	22.6	22.4	22.0	21.7	8.9	5.6	8.3	6.5	15.5	24.2	23.4
9-1/0830	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	NA	NA	NA	NA
9-2/1300	22.6	22.9	22.9	22.8	22.9	22.5	22.4	22.8	22.4	7.5	10.3	15.8	14.3	16.1	24.2	23.3
9-3/0900	22.7	22.8	23.0	22.8	22.9	22.6	22.4	22.0	22.5	0.0	0.0	0.0	0.0	16.5	24.2	23.3
9-4/1200	22.8	22.8	23.1	22.9	23.0	22.6	22.7	22.0	22.5	22.9	24.0	11.9	10.1	16.5	24.4	23.4
9-5/1200	22.8	22.9	23.2	23.1	23.0	23.8	22.5	21.9	22.5	7.1	10.9	10.6	8.8	16.6	24.3	23.3
9-6/0930	22.9	22.8	23.0	22.9	23.0	22.6	22.4	22.0	22.6	9.3	12.3	11.9	11.6	15.8	24.2	23.4
9-7/1000	22.8	23.0	23.0	22.8	22.9	22.6	22.4	22.9	22.4	5.2	3.1	7.4	6.1	14.9	24.3	23.4
9-8/0930	22.8	22.8	23.0	22.7	22.9	22.5	22.3	21.8	22.3	8.6	7.5	12.1	10.9	15.4	24.3	23.4
9-9/0900	22.8	22.8	22.9	22.8	22.9	22.6	22.3	21.8	22.3	5.7	4.5	11.0	8.7	15.7	24.3	23.4
9-10/0830	22.8	22.9	23.0	22.8	22.9	22.5	22.3	21.8	22.3	9.1	7.7	13.8	12.0	16.0	24.3	23.5
9-12/0945	22.4	22.3	22.5	22.3	22.5	22.1	21.9	21.4	22.0	7.8	8.6	13.4	12.3	14.1	24.1	23.2
9-13/0850	22.4	22.3	22.6	23.0	23.3	22.1	25.6	22.0	22.6	4.0	0.0	0.0	0.0	NA	NA	NA
9-16/0930	21.5	21.8	21.9	21.6	21.7	21.4	21.2	20.7	21.2	8.0	7.3	11.8	11.5	15.0	23.7	22.8
9-17/0930	21.7	22.0	22.0	21.8	21.9	21.5	21.3	20.8	21.4	5.3	5.6	10.6	8.9	15.3	23.6	22.8
9-18/0910	22.3	24.1	23.3	22.1	22.2	21.8	21.6	22.2	22.6	0.0	0.0	0.0	0.0	15.5	23.7	22.8
9-20/1000	21.7	22.0	22.1	22.0	22.1	22.4	21.4	21.2	22.1	0.0	0.0	0.0	0.0	14.7	23.6	22.9
9-22/0900	21.3	22.2	22.1	22.1	22.0	21.9	21.4	20.9	21.6	5.7	3.5	7.1	7.0	15.5	24.0	23.0
9-23/0900	22.0	22.2	22.3	22.2	22.1	21.9	21.6	21.1	21.7	5.2	3.0	7.6	7.4	15.8	23.8	22.9
9-24/0900	22.1	22.3	22.4	22.3	22.3	22.0	21.8	21.1	21.6	5.2	3.5	8.3	7.7	15.7	23.9	22.9
9-25/0930	22.1	22.4	22.5	22.3	22.2	22.0	21.5	21.2	21.8	4.2	3.2	7.8	6.7	16.2	24.0	23.0
9-28/1230	22.5	22.7	22.7	22.5	22.7	22.2	21.8	21.4	22.0	8.5	3.8	11.5	9.3	16.7	23.2	24.1
9-30/1345	21.6	21.8	21.8	21.5	22.0	21.6	21.6	21.1	21.5	14.0	7.9	9.4	8.5	14.4	23.0	23.7
10-2/0800	21.6	22.3	21.9	21.6	21.9	21.6	21.3	21.2	21.8	12.9	12.7	9.9	8.2	14.1	23.5	22.8
10-4/0930	23.4	22.4	22.1	22.0	22.0	21.7	21.4	21.1	21.6	13.2	6.1	10.4	8.6	16.5	22.9	23.4
10-7/1030	21.7	22.6	22.6	22.3	22.3	22.0	21.8	21.2	21.8	11.2	9.3	7.1	14.3	16.2	23.8	22.9
10-9/1030	22.3	22.9	22.6	22.4	22.5	22.1	21.9	22.0	22.5	10.3	12.3	7.4	10.4	17.4	23.9	23.0

TABLE C-1. GROUNDWATER LEVELS (in feet below ground surface) (Continued)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
10-11/0800	22.4	22.5	22.5	22.4	22.4	22.1	21.8	21.5	22.0	14.3	13.7	9.9	12.4	15.4	24.0	23.1
10-13/0830	22.3	22.7	22.5	22.3	22.6	22.1	21.9	21.5	22.2	13.6	13.9	11.5	12.5	NA	NA	NA
10-14/1100	22.5	21.7	22.5	22.4	22.5	22.1	22.0	21.3	21.9	14.1	12.2	11.5	12.3	15.9	24.0	23.1
10-16/1130	21.5	21.3	21.5	21.0	21.3	21.2	21.0	20.6	21.1	12.9	12.7	9.8	9.9	13.9	23.5	22.6
10-18/1000	21.3	21.8	21.6	21.5	21.5	21.1	20.8	20.3	20.8	14.1	8.5	10.2	9.3	15.0	23.5	22.5
10-19/1230	NA	21.7	22.1	21.4	21.7	21.3	21.0	20.6	21.1	11.1	21.4	15.3	14.7	NA	NA	NA
10-20/1200	18.7	18.9	18.7	17.9	18.2	18.4	18.4	18.5	19.0	9.5	15.8	7.0	15.1	11.8	21.5	20.6
10-21/1115	18.5	18.3	18.5	18.0	18.2	18.1	18.0	18.1	18.7	3.8	3.1	6.8	9.6	NA	NA	NA
10-22/1730	18.2	18.2	18.2	17.9	18.0	17.7	17.8	17.8	18.3	0.3	4.7	3.0	3.0	NA	NA	NA
10-23/1015	18.7	18.9	19.1	18.7	18.8	18.4	18.4	18.3	18.8	2.8	2.6	4.1	3.8	NA	NA	NA
10-25/1100	19.8	20.3	20.1	19.8	20.0	19.4	19.4	19.2	19.7	3.8	4.8	6.8	7.3	14.5	22.6	21.7
10-26/1000	20.2	20.3	20.3	20.1	20.3	19.8	19.8	NA	20.1	2.0	2.8	4.6	4.8	NA	NA	NA
10-27/0915	20.5	20.5	20.7	21.1	20.6	20.2	20.1	NA	20.3	3.6	5.0	6.2	7.6	NA	NA	NA
10-28/1030	20.6	20.9	21.0	20.7	20.7	19.9	20.2	NA	20.3	6.4	4.6	6.2	7.0	NA	22.9	22.1
10-30/1045	20.9	21.1	21.2	21.0	21.1	20.6	20.4	20.0	20.5	3.7	3.3	6.7	9.6	15.6	23.0	22.3
11-1/1330	21.1	21.2	21.3	21.3	21.3	20.8	20.6	20.2	20.7	4.2	3.8	7.6	9.8	15.8	23.2	22.4
11-2/1045	20.7	21.3	20.8	20.6	22.6	20.2	20.0	19.8	20.2	3.0	2.5	6.6	7.4	NA	NA	NA
11-4/1100	20.2	20.2	20.4	20.3	20.3	19.9	19.8	19.5	20.0	4.2	4.5	7.9	8.6	14.7	22.9	22.1
11-6/1150	20.6	20.7	20.8	20.7	20.8	20.4	20.2	19.8	NA	4.5	4.6	7.8	9.8	15.2	23.1	22.2
11-8/1100	21.0	21.1	21.2	21.1	21.1	20.7	20.5	19.3	NA	3.6	4.4	7.0	11.1	15.6	23.2	22.4
11-11/0935	21.3	21.4	21.5	21.4	21.5	21.2	21.0	20.5	21.2	4.7	3.9	8.7	10.3	NA	23.5	22.6
11-13/0950	21.5	NA	21.6	21.5	21.7	21.2	20.9	20.6	21.1	6.0	2.9	9.1	11.0	15.4	23.4	22.5
11-15/1235	21.5	21.7	21.7	21.7	21.8	21.3	21.0	20.7	21.3	22.6	24.2	21.4	21.4	15.4	23.1	22.7
11-18/1045	21.5	22.0	21.9	21.7	21.9	21.5	21.2	20.6	21.2	1.6	1.1	6.4	12.1	15.9	23.7	22.7
[illegible]	21.5	NA	21.8	21.7	21.7	21.2	21.7	20.7	21.4	-0.6	4.7	3.1	7.8	14.1	23.5	22.7
[illegible]	21.3	21.7	20.7	21.4	21.7	21.1	20.9	20.4	21.0	9.4	6.2	8.7	11.3	NA	NA	NA
[illegible]	19.7	21.0	20.8	20.6	20.6	20.2	20.2	19.8	20.4	8.2	6.9	3.3	3.7	13.7	23.4	22.5
[illegible]	[illegible]	20.4	20.3	20.1	20.2	19.7	19.6	19.6	20.0	1.2	5.5	7.1	13.1	13.8	23.1	22.3
[illegible]	[illegible]	21.2	21.1	20.9	21.1	20.6	20.5	20.0	20.4	10.5	-0.7	-0.9	5.1	14.6	23.3	22.5
[illegible]	[illegible]	[illegible]	21.4	21.2	21.2	20.9	20.7	20.3	20.8	4.2	4.4	4.8	11.1	15.4	23.5	22.6
[illegible]	[illegible]	[illegible]	20.9	20.8	20.6	20.2	20.1	19.8	20.1	8.9	3.9	5.8	5.1	13.7	23.5	22.6
[illegible]	[illegible]	[illegible]	[illegible]	21.3	21.4	21.0	20.9	20.4	20.9	1.6	2.5	4.7	5.8	15.1	NA	NA
[illegible]	[illegible]	[illegible]	[illegible]	21.7	21.9	21.4	21.2	20.8	21.3	5.5	3.7	1.8	3.4	15.9	23.7	22.7
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22.1	21.7	21.4	20.9	21.6	1.2	1.5	2.2	6.9	15.6	23.7	23.0

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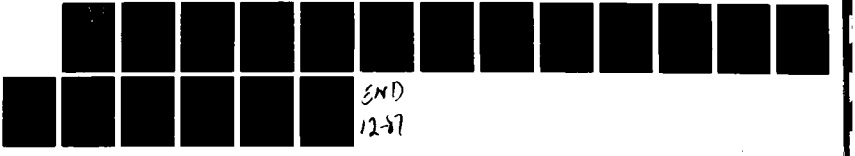

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TABLE C-1. GROUNDWATER LEVELS (in feet below ground surface) (Continued)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
12-27/1005	22.0	22.2	22.2	22.1	22.3	21.9	21.6	21.1	21.7	0.7	1.0	1.5	3.8	15.4	23.9	23.1
12-31/1025	22.1	22.2	22.4	22.2	22.3	21.9	21.7	21.2	21.7	1.1	1.2	1.9	6.6	16.2	23.9	23.0
1-3/1010	22.3	22.2	22.5	22.3	22.4	22.1	22.0	21.3	21.9	4.0	4.0	5.5	8.8	16.7	24.0	23.1
1-7/1010	22.2	22.3	22.5	22.4	22.4	22.2	21.9	21.3	21.9	2.7	3.3	1.8	3.9	16.9	23.9	23.0
1-9/1240	21.9	22.2	21.9	22.1	22.0	21.6	21.4	20.9	21.5	1.6	2.3	2.7	8.0	14.1	24.0	NA
1-10/0950	21.5	21.7	21.8	21.3	21.6	21.3	21.2	20.8	21.2	0.9	1.0	1.8	5.9	NA	NA	NA
1-14/1245	21.6	22.3	21.9	21.7	21.9	21.4	21.2	20.7	21.2	1.6	1.6	3.7	4.8	15.8	NA	NA
1-17/0915	21.9	22.1	22.2	22.1	22.0	21.7	21.5	21.0	21.5	3.0	0.5	1.0	2.6	15.7	23.8	22.8
1-21/1045	21.8	22.1	22.1	21.9	22.0	21.7	21.5	20.9	21.5	4.1	1.0	1.6	5.2	15.2	23.9	22.9
1-24/1115	22.1	22.2	22.3	21.9	22.2	22.0	21.9	21.1	21.7	0.7	13.8	2.4	6.4	NA	NA	NA
2-14/1030	21.7	22.3	22.0	22.0	22.1	21.9	21.9	21.3	21.8	12.4	2.2	4.0	13.4	16.6	25.2	28.2

TABLE C-2. GROUNDWATER LEVELS (in feet above sea level)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
5-17	617.4	616.7	617.4	617.4	618.4	617.6	617.5	617.3	617.2	NA	NA	NA	NA	NA	NA	NA
5-23	617.6	616.7	617.6	617.7	617.7	617.9	617.7	617.5	617.5	617.6	616.9	617.9	617.6	614.1	622.2	NA
5-30	617.4	616.7	617.3	617.4	617.4	617.5	617.4	617.3	617.3	617.4	617.2	617.6	617.4	622.3	613.4	NA
6-4/0900	NA	NA	NA	NA	NA	NA	NA	NA	NA	619.8	637.5	628.9	619.5	623.4	613.2	NA
6-4/1200	NA	NA	NA	NA	NA	NA	NA	NA	NA	619.3	627.8	626.0	618.9	NA	NA	NA
6-4/1730	NA	NA	NA	NA	NA	NA	NA	NA	NA	619.3	628.5	624.9	619.1	623.4	613.6	NA
6-5/0830	NA	NA	NA	NA	NA	NA	NA	NA	NA	618.8	629.2	622.6	618.6	623.0	613.6	NA
6-5/1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	618.8	638.3	625.0	618.6	622.9	613.7	NA
6-6/0830	NA	NA	NA	NA	NA	NA	NA	NA	NA	619.4	619.6	628.3	619.7	624.5	613.7	NA
6-7/0800	619.9	615.0	618.2	620.5	619.9	620.4	619.1	619.7	619.7	620.5	638.3	628.0	620.3	624.9	616.3	NA
6-7/1400	NA	614.8	NA	NA	NA	NA	NA	NA	NA	620.5	624.8	629.6	620.3	NA	NA	NA
6-8/0830	NA	NA	NA	NA	NA	NA	NA	NA	NA	621.5	620.5	634.8	630.2	NA	NA	NA
6-10/0900	617.7	616.7	616.0	NA	NA	NA	618.0	618.6	613.6	620.8	638.3	631.3	637.8	NA	NA	NA
6-11/1000	NA	NA	NA	NA	NA	NA	NA	NA	617.8	630.2	629.6	631.3	629.2	NA	NA	NA
6-11/1200	NA	NA	NA	NA	NA	NA	NA	NA	NA	632.3	628.6	631.3	626.2	NA	NA	NA
6-11/1700	617.5	610.7	617.4	617.4	617.9	617.6	616.7	617.6	617.4	628.2	628.7	633.4	628.3	622.2	613.4	613.1
6-12/0800	615.5	616.1	617.2	617.2	617.4	617.3	616.7	617.4	617.6	632.8	628.7	636.4	632.2	622.1	613.2	613.2
6-12/1500	617.3	616.5	617.3	617.4	617.1	617.6	617.3	617.3	617.3	638.2	628.1	632.0	637.8	622.3	613.7	613.1
6-12/1600	617.3	616.4	617.2	617.2	617.2	617.4	617.0	617.2	617.2	635.3	634.9	635.1	637.8	621.7	612.9	613.1
6-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	NA	638.7	637.8	NA	NA	NA
6-16	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	638.7	637.8	NA	NA	NA
6-17/0900	612.2	611.7	617.1	616.5	616.4	615.5	612.3	616.4	616.3	625.4	619.9	631.0	635.7	621.4	613.8	612.8
6-17/1600	NA	NA	NA	616.3	616.5	615.6	612.9	NA	616.4	627.3	624.7	634.9	637.8	620.4	613.8	612.9
6-18/0900	611.2	613.0	616.7	616.0	616.2	615.4	615.2	616.3	616.5	631.5	627.7	638.7	637.8	621.0	612.9	612.6
6-18/1600	614.4	613.6	616.5	616.2	616.5	615.5	616.6	616.4	616.5	635.9	628.7	638.7	637.8	620.8	612.8	612.8
6-19/0900	NA	NA	NA	NA	NA	NA	NA	NA	NA	626.0	632.7	624.7	637.8	622.8	612.8	612.8
6-19/1700	612.0	615.4	615.1	616.6	616.4	616.9	614.4	616.5	616.5	628.5	633.8	626.1	633.2	622.8	612.8	612.7
6-20/0900	613.5	615.7	616.9	616.9	616.8	617.1	616.7	616.7	616.8	NA	633.1	630.3	636.3	623.2	612.9	612.7
6-21/0900	612.7	615.0	617.1	617.4	617.0	617.4	616.9	617.2	617.1	617.9	619.7	623.6	624.9	623.4	613.6	612.7
6-21/1800	NA	NA	NA	NA	NA	NA	NA	NA	NA	622.7	620.3	628.0	625.9	623.2	613.1	612.9
6-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	638.7	NA	NA	NA	NA
6-23	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	638.7	NA	NA	NA	NA
6-24/0900	NA	NA	NA	NA	NA	NA	NA	NA	NA	633.0	624.0	638.7	637.8	623.8	614.3	614.0
6-24/1700	613.9	617.9	618.7	620.1	619.5	619.9	618.2	617.7	618.8	NA	624.4	634.5	637.8	623.9	614.2	614.0

TABLE C-2. GROUNDWATER LEVELS (in feet above sea level) (Continued)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
6-25	619.9	617.6	617.5	619.5	619.2	619.6	618.2	618.7	618.7	623.1	623.5	625.8	626.4	623.4	614.3	613.9
6-26/0800	618.6	617.9	618.5	618.6	618.7	617.6	617.5	618.2	618.3	634.2	632.0	638.7	634.4	623.1	613.9	613.9
6-26/1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	633.3	632.1	638.7	634.9	NA	NA	NA
6-27/0900	616.4	613.8	614.0	618.0	618.0	617.0	615.8	617.7	617.7	638.2	638.3	638.7	637.8	622.1	613.8	613.7
6-28/1230	617.8	617.2	617.7	617.8	617.9	618.1	617.8	617.6	617.6	638.2	638.3	638.7	637.8	622.0	613.6	613.5
6-28/1500	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	638.7	637.8	NA	NA	NA
6-29/1200	617.7	617.3	617.6	617.7	617.7	618.0	617.7	617.4	617.5	634.1	633.7	629.2	628.4	621.6	613.7	613.5
6-29/1430	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	635.0	638.7	NA	NA	NA	NA
6-29/1830	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	638.7	631.2	NA	NA	NA
6-30/0800	617.4	617.3	617.5	617.5	617.6	617.9	617.7	617.3	617.3	638.2	637.3	638.7	637.8	621.6	613.7	613.5
7-1/0900	617.8	615.0	617.3	617.3	617.3	617.4	617.4	617.1	617.1	638.2	638.3	638.7	637.8	621.5	613.4	613.3
7-1/1730	NA	NA	NA	NA	NA	NA	NA	NA	NA	636.7	635.4	635.3	634.7	NA	NA	NA
7-1/1900	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	638.7	637.8	NA	NA	NA
7-2/1430	617.3	616.7	617.8	617.2	617.3	617.6	617.4	617.1	617.0	634.3	633.6	633.5	632.9	621.4	613.3	613.2
7-4/1500	618.8	618.0	618.9	619.4	619.2	618.9	618.7	618.3	618.4	623.8	634.5	629.8	629.2	624.4	613.8	613.8
7-5/1000	619.4	619.0	619.4	619.8	619.7	619.7	619.3	618.8	618.8	620.3	635.6	631.0	630.4	623.5	613.9	613.9
7-8/1000	618.2	617.5	618.2	618.2	618.2	618.4	618.2	617.7	617.8	618.0	628.0	625.0	624.4	622.2	613.7	613.6
7-9/0930	618.0	617.3	617.8	617.8	618.0	618.0	618.0	617.4	617.6	617.7	634.5	623.6	623.0	622.1	613.6	613.7
7-10/1030	617.9	617.3	617.7	617.8	617.7	618.2	617.9	617.4	617.6	617.4	619.1	626.8	626.2	622.2	613.6	613.5
7-11/0945	617.9	617.3	617.6	617.9	616.9	617.8	617.8	617.5	617.5	617.5	617.1	624.7	624.1	622.7	613.6	613.4
7-12/0900	617.9	617.1	617.5	617.8	617.8	618.0	617.8	617.5	617.6	616.3	616.8	624.4	617.6	622.3	613.5	613.4
7-12/1530	NA	NA	NA	NA	NA	NA	NA	NA	NA	630.3	632.6	635.8	625.2	NA	NA	NA
7-13/0930	617.6	616.9	617.6	617.4	617.7	617.8	617.7	617.4	617.3	617.3	623.3	624.4	616.4	621.8	613.4	613.3
7-15/0930	617.4	616.8	617.2	617.3	617.2	617.5	617.3	617.2	617.1	616.8	627.6	625.2	617.2	621.2	614.2	613.2
7-16/1030	610.7	616.7	617.7	617.2	617.0	617.3	617.1	616.9	616.9	638.2	638.3	636.8	631.2	621.8	613.3	613.1
7-17/1000	617.0	616.5	617.1	617.0	616.9	617.3	617.1	616.9	616.9	623.0	627.4	625.5	616.7	621.1	613.2	613.1
7-18/1000	611.8	611.8	616.9	616.3	616.7	615.5	616.8	616.6	616.6	638.2	638.3	638.7	637.8	620.8	613.2	612.9
7-18/1200	NA	NA	NA	NA	NA	NA	NA	NA	NA	634.1	637.4	632.0	630.4	NA	NA	NA
7-18/1630	NA	NA	NA	NA	NA	NA	NA	NA	NA	631.5	635.6	629.2	623.6	NA	NA	NA
7-19/0930	617.1	616.0	617.1	617.3	616.9	617.4	617.0	616.7	616.9	624.5	629.1	625.6	617.7	621.4	612.9	612.9
7-19/1230	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	NA	NA	NA	NA	NA
7-19/1630	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	NA	NA	NA	NA	NA
7-20/1115	613.4	617.2	617.0	617.1	617.2	617.4	617.1	616.8	616.8	633.3	635.8	638.7	637.8	621.6	612.9	612.9
7-21/1330	617.0	617.2	616.9	616.9	616.9	617.2	616.9	616.7	616.8	629.1	632.3	626.2	620.8	621.3	612.9	612.9

TABLE C-2. GROUNDWATER LEVELS (in feet above sea level) (Continued)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
7-22/1100	612.4	613.9	616.8	617.0	616.7	617.0	616.8	616.6	616.7	638.2	638.3	628.5	626.5	621.0	612.8	612.9
7-23/1000	616.9	617.2	616.6	616.7	616.7	617.2	616.8	616.6	616.5	632.5	633.0	625.8	616.4	620.7	612.8	612.9
7-24/1030	616.8	612.9	616.6	616.6	616.6	616.9	616.7	616.4	616.5	633.5	634.7	628.8	637.8	620.6	613.7	612.1
7-25/1330	616.6	615.5	616.6	616.5	616.6	616.7	616.5	616.3	616.4	629.4	630.1	624.7	623.2	620.5	612.8	612.9
7-26/1025	615.8	614.6	616.2	616.4	615.9	616.6	616.0	615.9	616.1	619.4	633.6	625.0	616.1	620.1	612.5	612.6
7-26/1300	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	NA	NA	NA	NA	NA
7-27/1400	615.9	616.1	616.3	616.6	616.0	616.6	615.9	615.9	616.1	619.5	626.5	621.5	619.7	621.0	612.5	612.6
7-27/2030	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	638.7	NA	NA	NA	NA
7-28/1400	615.8	616.2	616.3	616.4	616.0	616.8	616.1	616.0	616.1	619.5	633.7	625.0	616.1	620.1	612.5	612.6
7-29/0830	615.2	614.5	616.1	616.2	616.1	616.4	616.1	615.9	616.1	618.4	635.0	624.8	616.1	620.1	612.5	612.6
7-30/0700	614.1	616.2	617.1	615.4	617.0	615.7	615.4	614.8	615.7	616.5	628.9	625.7	616.2	619.8	612.5	612.3
7-31/0730	616.1	616.2	617.0	615.5	617.1	615.7	615.4	614.8	615.7	616.5	628.9	625.7	616.1	619.8	612.5	612.3
8-1/0830	615.4	614.5	615.8	617.4	615.5	616.1	615.8	614.9	615.0	625.2	624.7	622.3	615.7	619.8	612.3	612.1
8-2/0800	616.4	615.9	616.1	616.5	616.7	616.4	616.4	616.1	616.2	620.3	626.1	621.4	619.9	621.0	612.5	611.3
8-3/0900	616.4	615.9	616.2	616.6	616.6	616.4	616.4	616.2	616.3	619.4	626.5	621.5	619.8	621.0	612.5	612.2
8-4/1000	616.3	615.6	616.2	616.2	616.4	616.7	615.9	615.9	616.0	627.2	625.1	621.8	619.3	620.7	612.0	612.4
8-5/1000	616.2	615.5	616.2	616.3	616.3	616.5	616.2	616.0	616.1	621.9	625.7	621.8	615.8	620.7	612.0	612.3
8-6/1400	616.2	615.6	616.1	616.4	616.1	616.2	616.2	616.0	615.9	617.2	629.1	619.3	616.1	620.5	612.7	612.5
8-7/1310	616.2	615.6	616.2	616.3	616.2	616.3	616.2	616.0	616.0	617.3	629.2	619.1	616.2	620.5	612.7	612.5
8-8/1100	615.9	615.6	616.0	616.0	616.1	616.1	616.1	616.0	616.0	628.9	631.6	624.8	617.0	620.3	612.5	612.5
8-9/1230	616.0	615.6	616.1	617.1	616.1	616.2	616.1	616.0	616.0	626.3	631.4	625.9	624.4	620.2	612.4	612.4
8-10/1430	616.0	615.5	616.1	616.1	616.2	616.3	615.8	616.0	616.0	638.2	638.3	630.8	628.9	620.1	612.4	612.4
8-11/0930	615.9	615.4	615.8	615.9	615.9	616.0	615.8	615.7	615.8	630.7	628.9	629.2	630.3	619.8	612.5	611.4
8-12/0900	615.8	615.3	615.8	615.8	615.9	616.0	615.7	615.7	615.8	626.8	628.3	623.3	619.0	619.8	612.5	612.4
8-13/1030	609.6	615.3	613.7	615.8	615.5	616.0	612.7	615.5	615.4	631.6	633.0	632.2	634.5	619.8	612.5	612.4
8-14/0930	609.6	611.4	615.7	615.8	615.7	616.0	615.7	615.5	615.6	626.6	629.0	630.5	636.0	619.6	612.4	612.4
8-15/0830	610.6	615.4	615.7	615.6	615.7	615.8	615.6	615.4	615.4	638.2	638.3	630.0	637.8	619.6	612.4	612.4
8-16/0900	615.6	615.3	615.7	615.8	615.7	616.0	615.7	615.6	615.5	630.8	631.6	632.8	624.4	619.8	612.4	612.4
8-17/0900	615.6	615.3	615.6	615.8	615.7	615.9	615.6	615.3	615.4	631.7	632.5	638.7	637.8	619.7	612.4	612.4
8-18/1000	615.6	615.3	615.6	615.6	615.6	615.6	615.5	615.3	615.4	638.2	636.5	637.0	637.8	619.7	612.4	612.4
8-19/1130	615.6	615.2	616.5	615.5	615.6	615.7	615.5	615.3	615.4	624.8	626.2	NA	NA	619.3	612.4	612.3
8-20/1630	610.6	615.3	615.2	615.4	615.6	615.6	615.3	615.3	615.4	624.0	638.3	630.1	637.8	619.2	612.4	612.4
8-21/1100	615.6	615.2	615.5	615.6	615.7	615.7	615.5	615.3	615.4	619.1	634.4	628.8	629.7	619.3	612.4	612.3
8-22/0930	611.5	611.5	615.5	615.3	615.4	615.6	615.3	615.2	615.3	638.2	632.6	633.4	637.8	619.2	613.2	611.6

TABLE C-2. GROUNDWATER LEVELS (in feet above sea level) (Continued)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
8-23/1830	615.3	614.9	NA	NA	615.5	615.5	615.3	615.2	615.3	631.5	627.1	624.9	626.4	619.8	612.4	612.4
8-24/1200	615.5	614.8	615.5	615.6	615.3	615.6	615.3	615.2	615.3	632.7	638.3	638.7	637.8	619.8	612.4	612.4
8-25/0900	635.6	615.3	609.7	615.8	615.8	615.7	615.5	615.3	615.4	626.5	628.1	625.8	626.1	619.8	612.4	612.4
8-27/1200	615.6	615.2	615.7	615.7	615.7	615.8	615.6	615.3	615.4	625.7	626.5	623.2	622.6	621.1	612.4	612.4
8-28/1000	615.6	615.2	615.7	615.8	615.7	615.9	615.6	615.3	615.4	NA	NA	NA	NA	620.9	612.4	612.4
8-29/1100	615.6	615.2	615.6	615.8	615.7	615.9	615.6	615.4	615.4	NA	NA	NA	NA	620.5	612.4	612.4
8-30/1200	615.6	610.8	615.7	615.6	615.7	615.8	615.7	615.5	615.5	633.3	638.3	638.7	637.8	622.2	612.5	612.4
8-31/1000	615.6	615.3	615.7	615.8	615.7	615.9	615.7	615.4	616.3	629.3	632.7	630.4	631.3	621.6	612.5	612.4
9-1/0830	NA	NA	NA	NA	NA	NA	NA	NA	NA	638.2	638.3	638.7	NA	NA	NA	NA
9-2/1300	615.9	615.2	615.8	615.8	615.8	616.0	615.7	614.6	615.6	630.7	628.0	622.9	623.5	621.0	612.5	612.5
9-3/0900	615.8	615.3	615.7	615.8	615.8	615.9	615.7	615.4	615.5	638.2	638.3	638.7	637.8	620.6	612.5	612.5
9-4/1200	615.7	615.3	615.6	615.7	615.7	615.9	615.4	615.4	615.5	615.3	614.3	626.8	627.7	620.6	612.3	612.4
9-5/1200	615.7	615.2	615.5	615.5	615.7	614.7	615.6	615.5	615.5	631.1	627.4	628.1	629.0	620.5	612.4	612.5
9-6/0930	615.6	615.3	615.7	615.7	615.7	615.9	615.7	615.4	615.4	628.9	626.0	626.8	626.2	621.3	612.5	612.4
9-7/1000	615.7	615.1	615.7	615.8	615.8	615.9	615.7	614.5	615.6	633.0	635.2	631.3	631.7	622.2	612.4	612.4
9-8/0930	615.7	615.3	615.7	615.9	615.8	616.0	615.8	615.6	615.7	629.6	630.8	626.6	626.9	621.7	612.4	612.4
9-9/0900	615.7	615.3	615.8	615.8	615.8	615.9	615.8	615.6	615.7	632.5	633.9	627.7	629.2	621.4	612.4	612.4
9-10/0830	615.7	615.2	615.7	615.8	615.8	616.0	615.8	615.6	615.7	629.1	630.6	624.9	625.8	621.1	612.4	612.3
9-12/0945	616.1	615.8	616.2	616.3	616.2	616.4	616.2	616.0	616.0	630.4	629.7	625.3	625.6	623.0	612.6	612.6
9-13/0850	616.1	615.8	616.1	615.6	615.4	616.4	612.5	615.4	615.4	634.2	638.3	638.7	637.8	NA	NA	NA
9-16/0930	617.0	616.3	616.8	617.0	617.0	617.1	616.9	616.7	616.8	630.2	631.0	626.9	626.3	622.1	613.0	613.0
9-17/0930	616.8	616.1	616.7	616.8	616.8	617.0	616.8	616.6	616.6	632.9	632.7	628.1	628.9	621.9	613.1	613.0
9-18/0910	616.2	614.0	615.4	616.5	616.5	616.7	616.5	615.2	615.4	638.2	638.3	638.7	637.8	621.6	613.0	613.0
9-20/1000	616.8	616.1	616.6	616.6	616.6	616.1	616.7	616.2	615.9	638.2	638.3	638.7	637.8	622.5	613.1	612.9
9-22/0900	617.2	616.0	616.6	616.6	616.7	616.7	616.7	616.5	616.4	632.5	634.8	631.6	630.8	621.6	612.7	612.8
9-23/0900	616.5	615.9	616.4	616.4	616.6	616.6	616.5	616.3	616.3	633.0	635.3	631.1	630.4	621.3	612.9	612.9
9-24/0900	616.4	615.8	616.3	616.3	616.4	616.5	616.3	616.3	616.4	633.0	634.8	630.4	630.1	621.4	612.8	612.9
9-25/0930	616.4	615.7	616.2	616.3	616.5	616.5	616.6	616.2	616.2	634.0	635.1	630.9	631.1	620.9	612.7	612.8
9-28/1230	616.0	615.4	616.0	616.1	616.0	616.3	616.3	616.0	616.0	629.7	634.5	627.2	628.5	620.4	613.5	611.7
9-30/1345	616.9	616.3	616.9	617.1	616.7	616.9	616.5	616.3	616.5	624.2	630.4	629.3	629.3	622.7	613.7	612.1
10-2/0800	616.9	615.8	616.8	617.0	616.8	616.9	616.8	616.2	616.2	625.3	625.6	628.8	629.6	623.0	613.2	613.0
10-4/0930	615.1	615.7	616.6	616.6	616.7	616.8	616.7	616.3	616.4	625.0	632.2	628.3	629.2	620.6	613.8	612.4
10-7/1030	616.8	615.5	616.1	616.3	616.4	616.5	616.3	616.2	616.2	627.0	629.0	631.6	623.5	620.9	612.9	612.9
10-9/1030	616.2	615.2	616.1	616.2	616.2	616.4	616.2	615.4	615.5	627.9	626.0	631.3	627.4	619.7	612.8	612.8

TABLE C-2. GROUNDWATER LEVELS (in feet above sea level) (Continued)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
10-11/0800	616.1	615.6	616.2	616.2	616.3	616.4	616.3	615.9	616.0	623.9	624.6	628.8	625.4	621.7	612.7	612.7
10-13/0830	616.2	615.4	616.2	616.3	616.1	616.4	616.2	615.9	615.8	624.6	624.4	627.2	625.3	NA	NA	NA
10-14/1100	616.0	616.4	616.2	616.2	616.2	616.4	616.1	616.1	616.1	624.1	626.1	627.2	625.5	621.2	612.7	612.7
10-16/1130	617.0	616.8	617.2	617.6	617.4	617.3	617.1	616.8	616.9	625.3	625.6	628.9	627.9	623.2	613.2	613.2
10-18/1000	617.2	616.3	617.1	617.1	617.2	617.4	617.3	617.1	617.2	624.1	629.8	628.5	628.5	622.1	613.2	613.3
10-19/1230	NA	616.4	616.6	617.2	617.0	617.2	617.1	616.8	616.9	627.1	616.9	623.4	623.1	NA	NA	NA
10-20/1200	619.8	619.2	620.0	620.7	620.5	620.1	619.7	618.9	619.0	628.7	622.5	631.7	622.7	625.3	615.2	615.2
10-21/1115	620.0	619.8	620.2	620.6	620.5	620.4	620.1	619.3	619.3	634.4	635.2	631.9	628.2	NA	NA	NA
10-22/1730	620.3	619.9	620.5	620.7	620.7	620.8	620.3	619.6	619.7	637.9	633.6	635.7	634.8	NA	NA	NA
10-23/1015	619.8	619.2	619.6	619.9	619.9	620.1	619.7	619.1	619.2	635.4	635.7	634.6	634.0	NA	NA	NA
10-25/1100	618.7	617.8	618.6	618.8	618.7	619.1	618.7	618.3	618.3	634.4	633.5	631.9	630.5	622.6	614.1	614.1
10-26/1000	618.3	617.8	618.4	618.5	618.4	618.7	618.3	NA	617.9	636.2	635.5	634.1	633.0	NA	NA	NA
10-27/0915	618.0	617.6	618.0	617.5	618.1	618.3	618.0	NA	617.7	634.6	633.3	632.5	630.2	NA	NA	NA
10-28/1030	617.9	617.2	617.7	617.9	618.0	618.6	617.9	NA	617.7	631.8	633.7	632.5	630.8	NA	613.8	613.8
10-30/1045	617.6	617.0	617.5	617.6	617.6	617.9	617.7	617.4	617.5	634.5	635.0	632.0	628.2	621.5	613.7	613.5
11-1/1330	617.4	616.9	617.4	617.3	617.4	617.7	617.5	617.2	617.3	634.0	634.5	631.1	628.0	621.3	613.5	613.4
11-2/1045	617.8	616.8	617.9	618.0	616.1	618.3	618.1	617.6	617.8	635.2	635.8	632.1	630.4	NA	NA	NA
11-4/1100	618.3	617.9	618.3	618.3	618.4	618.6	618.3	617.9	618.0	634.0	633.8	630.8	629.2	622.4	613.8	613.7
11-6/1150	617.9	617.4	617.9	617.9	617.9	618.1	617.9	617.6	NA	633.7	633.7	630.9	628.0	621.9	613.6	613.6
11-8/1100	617.5	617.0	617.5	617.5	617.6	617.8	617.6	618.1	NA	634.6	633.9	631.7	626.7	621.5	613.5	613.4
11-11/0935	617.2	616.7	617.2	617.2	617.2	617.3	617.1	616.9	616.8	633.5	634.4	630.0	627.5	NA	613.2	613.2
11-13/0950	617.0	NA	617.1	617.1	617.0	617.3	617.2	616.8	616.9	632.2	635.4	629.6	626.8	621.7	613.3	613.3
11-15/1235	617.0	616.4	617.0	616.9	616.9	617.2	617.1	616.7	616.7	615.6	614.1	617.3	616.4	621.7	613.6	613.1
11-18/1045	617.0	616.1	616.8	616.9	616.8	617.0	616.9	616.8	616.8	636.6	637.2	632.3	625.7	621.2	613.0	613.1
11-20/1130	617.0	NA	616.9	616.9	617.0	617.3	616.4	616.7	616.6	638.8	633.6	635.6	630.0	623.0	613.2	613.1
11-22/1545	617.2	616.4	618.0	617.2	617.0	617.4	617.2	617.0	617.0	628.8	632.1	630.0	626.5	NA	NA	NA
11-26/1050	618.8	617.1	617.9	618.0	618.1	618.3	617.9	617.6	617.6	630.0	631.4	635.4	634.1	623.4	613.3	613.3
11-29/1135	618.4	617.7	618.4	618.5	618.5	618.8	618.5	617.8	618.0	637.0	632.8	631.6	624.7	623.3	613.6	613.5
12-3/0915	617.6	616.9	617.6	617.7	617.6	617.9	617.6	617.4	617.6	627.7	639.0	639.6	632.7	622.5	613.4	613.3
12-6/1100	617.3	616.6	617.3	617.4	617.5	617.6	617.4	617.1	617.2	634.0	633.9	633.9	626.7	621.7	613.2	613.2
12-10/1030	617.8	617.2	617.8	617.8	618.1	618.3	618.0	617.6	617.9	629.3	634.4	632.9	632.7	623.4	613.2	613.2
12-13/1140	617.3	616.7	617.2	617.3	617.3	617.5	617.2	617.0	617.1	636.6	635.8	634.0	632.0	622.1	NA	NA
12-17/1100	616.9	616.4	616.8	617.0	616.8	617.2	616.9	616.6	616.7	632.7	634.6	636.9	634.4	621.2	613.0	613.1
12-24/1055	616.5	616.1	616.5	616.9	616.6	616.9	616.7	616.5	616.4	637.0	636.8	636.5	630.9	621.5	613.0	612.9

TABLE C-2. GROUNDWATER LEVELS (in feet above sea level) (Continued)

Date/Time	P1	P2	P3	P4	P5	P6	P7	P8	P9	I1	I2	I3	I4	M1	M2	CC
12-27/1005	616.5	616.0	616.5	616.5	616.4	616.7	616.5	616.3	616.3	637.5	637.3	637.2	634.0	621.7	612.8	612.8
12-31/1025	616.4	616.0	616.3	616.5	616.4	616.6	616.4	616.2	616.3	637.1	637.1	636.8	631.2	620.9	612.8	612.8
1-3/1010	616.2	615.9	616.2	616.4	616.3	616.5	616.1	616.2	616.1	634.2	634.3	633.2	629.0	620.4	612.7	612.8
1-7/1010	616.3	615.8	616.2	616.2	616.3	616.3	616.2	616.1	616.1	635.5	635.0	636.9	633.9	620.2	612.8	612.8
1-9/1240	616.6	615.9	616.8	616.5	616.7	616.9	616.7	616.5	616.5	636.6	636.0	636.0	629.8	623.0	612.7	NA
1-10/0950	617.0	616.4	616.9	617.3	617.1	617.2	616.9	616.6	616.8	637.3	637.3	636.9	631.9	NA	NA	NA
1-14/1245	616.9	615.8	616.8	616.9	616.8	617.1	616.9	616.7	616.8	636.6	636.7	635.0	633.0	621.3	NA	NA
1-17/0915	616.6	616.1	616.5	616.6	616.7	616.8	616.6	616.4	616.5	635.2	637.8	637.7	635.2	621.4	612.9	613.1
1-21/1045	616.7	616.0	616.6	616.7	616.7	616.8	616.6	616.5	616.5	634.1	637.3	637.1	632.6	622.0	612.8	612.9
1-24/1115	616.4	616.0	616.4	616.7	616.5	616.5	616.2	616.3	616.3	637.5	624.5	636.3	631.4	NA	NA	NA
2-14/1030	616.8	615.8	616.7	616.6	616.6	616.6	616.2	616.1	616.2	625.8	636.1	634.7	624.4	620.5	611.5	607.6

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APPENDIX D

METHOD FOR DETERMINING TOTAL HYDROCARBONS IN SOILS AND GROUNDWATER

METHOD FOR DETERMINING TOTAL HYDROCARBONS IN SOILS AND GROUNDWATER

Soil

Extraction Procedures

1. Start with 50 g sample spiked with 5 mL of hexdecane
2. Extract with 50 mL pentane
3. Blow down with 5 mL of nitrogen gas
4. Analyze extraction by GC/FID (gas chromatography/flame ionization detector)

Groundwater

Extraction Procedures

1. Start with 500 mL water sample
2. Add 20 ml pentane for extraction
3. Repeat with 20 mL pentane two (2) additional times
4. Blow sample down with nitrogen gas to 5 mL
5. Analyze extraction by GC/FID (gas chromatography/flame ionization detector)

Standard GC/FID QA/QC procedures were utilized.

APPENDIX E

METHODS FOR MICROBIOLOGICAL ENUMERATION AND MICROBIAL ANALYSIS RESULTS

METHOD FOR MICROBIOLOGICAL SCREENING
FMC/Aquifer Remediation Systems

MEDIA COMPOSITION

Ingredient	Concentration (gm/L)	Stock %
$(NH_4)_2SO_4$	2.5	25.0
KH_2PO_4	0.36	3.6
$N_aH_2PO_4.H_2O$	0.12	1.2
$MgCl_2.6H_2O$	0.25	25.0
$CaCl_2.2H_2O$	0.02	10.0
$FeSO_4.7H_2O$	0.005	2.5
$ZnSO_4.7H_2O$	0.0016	0.8
$MnCl_2.4H_2O$	0.00004	0.02
$CoCl_2.6H_2O$	0.00004	0.02
$CuSO_4.5H_2O$	0.0000002	0.0001
Noble Agar (Difco)	15.0 gm/L	
Nutrient Agar (BBL)	2.3 gm/L	

PROCEDURE

Media Prep

1. Mineral Salts Agar -
   Prepare mineral salts solution by making appropriate additions from stock solutions to distilled water. Adjust pH to 7.0± 0.05. Bring to final volume. Add Noble Agar, boil for approximately 1 minute, until solution is clear, autoclave for 20 minutes. Pour plates and allow to cool.

2. Nutrient Agar -
   Prepare exactly as above (mineral salts agar). Include Nutrient Agar in addition to Noble Agar. Boil, autoclave, pour and cool.

3. Dilution Tubes -
   Prepare the mineral salts solution, as in no.1 above. Adjust pH to 7.0± 0.05, bring to final volume. Dispense 9.0 mL to clean, screw cap culture tubes. Cap the tubes and autoclave for 20 minutes.

Plating Procedure

1. Sample is shaken thoroughly and 1.0 mL is dispensed to a 9.0 mL dilution tube. This represents a 1:10 or 10^1 dilution. The sample is mixed (Voertex or shake) and 1.0 mL is added to the next tube - a 1:100 or 10^2 dilution, and so on. Usually the dilution series is carried to 10^5. 0.1 mL from each dilution is added to a Nutrient Agar and a Mineral Salts Agar plate. 0.1 mL from a 10^5 dilution represents a 10^6 dilution factor (results will be expressed as colony forming units/mL). If time permits, each dilution may be plated in duplicate or triplicate. After adding the sample to the plate, the droplet is spread over the agar surface by dipping a "hockey stick" (glass rod bent in an L shape) in 95 percent ethanol flaming, allow to cool, and spread droplet across the agar. The "hockey stick" should be sterilized in-between each plate.

2. After the plates have been inoculated, the Nutrient Agar plates are incubated at room temperature, inverted (agar side of dish up). Mineral Salts Agar plates are incubated, inverted, placed in dessicator jars with an Erlenmeyer flask containing gasoline attached to the side arm of the dessicator lid.

3. After approximately 1 week incubation, plates may be counted. Plates which have 20-300 colonies should be counted. If more than one dilution is counted, counts may be averaged. For

example:

10^5 dilution - 160 Colonies
10^6 dilution - 23 Colonies

$$\text{Final Count} - \frac{160 \times 10^5 \text{ CFU/ml} + 23 \times 10^6 \text{ CFU/mL}}{2}$$

$$= 2.0 \times 10^7 \text{ CFU/mL}$$

Note: Final counts should be based only on the plates which have more than 20, but less than 300 colonies.

METHOD FOR MICROBIOLOGICAL SCREENING

Biosystems, Inc.

MEDIA COMPOSITION

Ingredient	Concentration (gm/L)
KH_2PO_4	0.4
Na_2HPO_4	0.6
NH_4NO_3	1.0
$MgSO_4 \cdot 7H_2O$	0.2
Na_2CO_3	0.1
$CaCl_2 \cdot 2H_2O$	0.01
$MnSO_4 \cdot H_2O$	0.02
$FeSO_4 \cdot 7 H_2O$	0.005

PROCEDURE

1. Use standard basal mineral salts medium (MM) of the above composition. Add salts and 1.5 percent washed agar to 1000 mL distilled water. Adjust pH to 6.8 - 7.0 and autoclave.

2. Prepare dilution blanks with water taken from the geologic formation at Kelly AFB. Dispense 9.0 mL of groundwater to clean, screw cap culture tubes. Cap the tubes and autoclave.

3. Shake sample thoroughly and dispense 1.0 mL to 9.0 mL dilution tube. Make additional 1:100 and 1:1000 dilutions up to a dilution series of 10^5.

4. Add 0.1 mL from each dilution to the agar plates. Spread the droplet over the agar surface with an L-shaped glass rod which has been dipped

in 95 percent ethanol, flamed and allowed to cool. The glass rod should be sterilized before spreading each sample on the agar plate.

5. After inoculating the plates, the plates are inverted and incubated at room temperature for 7 days for enumeration of total viable bacteria.

6. Plates inoculated for enumeration of hydrocarbon utilizing bacteria are placed inverted in a dessicator jar with an Erlenmeyer flask containing gasoline attached to the side arm of the dessicator lid. Incubation is carried out at room temperature for 21 days for full development of hydrocarbon utilizing colonies.

7. Plates containing 20-300 colonies should be counted. If more than one dilution is counted, counts may be averaged. Results are recorded as colony forming units/mL.

TABLE E-1 SUMMARY OF TOTAL BACTERIA IN SOILS (Continued)

(cells/gm x 10^5)

Soil Boring	Depth (feet BGS)	4/22/85-4/30/85	7/30/85-8/03/85	12/04/85	12/19/85
P-1	22 - 24	100			
P-1	27 - 29	78			
P-3	21 - 23	34			
P-3	28 - 30	1.1			
I-2	20 - 22	0.43			
I-2	28 - 30	1.1			
I-3	25 - 27	0.83			
I-3	30 - 32	19			
SB-1 (I-2)	25 - 27		10		
SB-2 (I-3)	25 - 27		120		
SB-2 (dup) (I-3)	25 - 27		69		
SB-3 (I-4)	25 - 27		37		
SB-3 (dup) (I-4)	25 - 27		140		
SB-4 (P-9)	25 - 27		29		
SB-4 (dup) (P-9)	25 - 27		0.40		
SB-5 (I-2)	20 - 22			0.31	
SB-6 (I-3)	20 - 22			0.0068	
SB-7a (I-4)	20 - 22			1.4	
SB-7b (I-4)	25 - 27			0.24	
SB-8 (P-9)	21 - 23			1.2	
SB-8 (dup) (P-9)	21 - 23			2.12	
SB-9 (I-2)	22 - 24				0.25
SB-10 (I-3)	22 - 24				2.2
SB-11a (I-4)	22 - 24				0.36
SB-11b (I-4)	25 - 27				0.12
SB-12 (P-9)	21 - 23				0.08
SB-12 (dup) (P-9)	21 - 23				0.068

BGS - Below ground surface
Well numbers in ( ) indicate closest well to soil boring location

TABLE E-2 SUMMARY OF HYDROCARBON - UTILIZING BACTERIA IN SOILS

(cells/gm x 10^5)

Soil Boring	Depth (feet BGS)	4/22/85-4/30/85	7/30/85-8/03/85	12/04/85	12/19/85
P-1	22 - 24	110			
P-1	27 - 29	51			
P-3	21 - 23	19			
P-3	28 - 30	0.64			
I-2	20 - 22	0.18			
I-2	28 - 30	1.1			
I-3	25 - 27	0.60			
I-3	30 - 32	16			
SB-1 (I-2)	25 - 27		2.4		
SB-2 (I-3)	25 - 27		5.3		
SB-2 (dup)(I-3)	25 - 27		14		
SB-3 (I-4)	25 - 27		1.2		
SB-3 (dup)(I-4)	25 - 27		8.5		
SB-4 (P-9)	25 - 27		8.5		
SB-4 (dup)(P-9)	25 - 27		0.12		
SB-5 (I-2)	20 - 22			0.024	
SB-6 (I-3)	20 - 22			0	
SB-7a (I-4)	20 - 22			0.0024	
SB-7b (I-4)	25 - 27			0.012	
SB-8 (P-9)	21 - 23			0.024	
SB-8 (dup)(P-9)	21 - 23			0.0216	
SB-9 (I-2)	22 - 24				0.026
SB-10 (I-3)	22 - 24				1.5
SB-11a (I-4)	22 - 24				0.17
SB-11b (I-4)	25 - 27				0.012
SB-12 (P-9)	21 - 23				0.002
SB-12 (dup)(P-9)	21 - 23				0.0016

BGS - Below ground surface
Well numbers in ( ) indicated closest well to soil boring location

TABLE E-3. MICROBIAL POPULATIONS IN GROUNDWATER

Date:	5/15	6/6	6/25	7/15	7/31	8/14	8/29	9/17	10/8	10/25	12/4	1/16	2/18
TOTAL BACTERIA (cells/ml x 1 x E5)													
I1	5.800	NA	NA	160.000	0.040	0.001	0.001	0.001	0.001	0.001	0.240	0.001	0.0032
I2	0.700	NA	NA	5.000	0.017	0.001	0.001	0.001	0.001	0.001	0.076	0.001	0.0003
I3	3.900	NA	NA	1.800	0.390	0.001	0.001	0.001	0.001	0.001	0.164	1.180	0.000
I4	4.400	NA	NA	32.000	0.760	0.001	0.001	0.001	0.001	0.001	0.184	26.000	0.002
P1	5.700	2.400	NA	21.000	4.100	2.000	8.000	9.300	12.000	4.400	0.370	1.400	0.240
P2	11.000	7.600	0.950	7.800	3.400	0.850	20.000	23.000	12.000	4.400	1.280	6.200	1.700
P3	28.000	1.000	0.680	22.000	1.700	2.700	6.800	3.200	5.100	21.000	0.530	3.000	1.800
P4	24.000	NA	0.990	4.400	0.190	3.400	2.800	1.700	3.400	0.660	0.170	1.440	0.600
P5	15.000	31.000	2.400	8.300	0.083	1.700	5.200	1.300	8.400	14.000	0.068	5.400	0.760
P6	15.000	2.900	0.970	8.900	0.520	2.100	2.800	2.200	3.700	8.600	0.256	5.120	0.920
P7	29.000	2.300	2.900	3.800	1.200	3.000	15.000	4.200	4.200	2.600	0.380	3.680	1.100
P8	4.300	1.500	0.600	11.000	0.950	3.200	3.000	3.000	2.200	NA	0.620	14.400	0.860
P9	0.400	9.000	3.200	20.000	0.740	1.900	3.100	2.400	2.900	1.500	0.164	1.400	0.270
M1	17.000	0.400	38.000	22.000	14.000	25.000	16.000	36.000	6.700	21.000	0.175	42.000	3.500
M2	1.900	1.000	1.300	11.000	1.300	22.000	15.000	19.000	2.300	5.300	0.030	1.120	0.690
CC	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.300	NA	0.560	0.680
HYDROCARBON DEGRADERS (cells/ml x 1 x E5)													
I1	1.900	NA	NA	130.000	0.001	0.001	0.001	0.001	0.001	0.001	0.0688	0.006	0.0016
I2	1.300	NA	NA	2.800	0.001	0.001	0.001	0.001	0.001	0.001	0.0576	0.002	0.0002
I3	0.700	NA	NA	3.700	0.020	0.001	0.001	0.001	0.001	0.001	0.0352	0.480	0.000
I4	1.200	NA	NA	7.000	0.340	0.001	0.001	0.001	0.001	0.001	0.0640	1.520	0.001
P1	0.400	1.300	NA	1.400	0.013	0.400	0.420	0.500	0.200	0.035	0.0060	0.052	0.068
P2	2.600	0.300	0.095	0.120	0.060	0.120	0.790	0.170	0.024	0.500	0.0480	0.062	9.400
P3	3.900	0.030	0.160	8.800	0.006	1.500	1.000	1.800	1.000	9.800	0.0004	0.088	0.960
P4	3.900	0.500	0.031	1.400	0.048	1.300	0.420	9.200	0.670	0.240	0.0028	0.040	0.190
P5	2.500	0.100	0.037	0.015	0.005	1.400	0.380	0.500	1.500	9.700	0.0002	0.016	0.056
P6	7.300	0.600	0.120	1.500	0.110	0.370	0.760	0.490	0.530	1.700	0.0018	0.400	0.320
P7	8.700	0.700	0.002	0.078	0.067	2.100	2.200	0.950	0.360	2.100	0.0070	0.610	0.054
P8	1.800	0.040	0.004	1.000	0.250	1.800	0.200	0.630	0.530	NA	0.0344	0.136	0.170
P9	0.070	1.100	0.079	11.000	0.050	0.630	0.570	0.850	18.000	0.580	0.0046	2.240	0.050
M1	4.900		0.800	2.900	2.500	0.680	1.400	4.200	7.500	0.330	0.0055	0.400	5.800
M2	0.200		0.340	2.000	0.870	11.000	16.000	4.100	0.910	2.500	0.0240	0.220	0.220
CC	NA		NA	NA	NA	NA	NA	NA	NA	0.360	NA	0.180	0.200

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